# MODELING EMISSIONS INVENTORY DEVELOPMENT

*For*

*AIR QUALITY MODELING*

*IN SUPPORT OF DEVELOPING STRATEGIES*

*TO ATTAIN THE FEDERAL ANNUAL $PM_{2.5}$ AIR*

*QUALITY STANDARD IN CENTRAL CALIFORNIA*

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# 1 INTRODUCTION

To support State Implementation Plan (SIP) development, emission inputs to air quality models (commonly and interchangeably referred to as ‘modeling inventories’ or ‘gridded inventories’) are created by a team of ARB staff in the Modeling and Meteorology Branch and the Emissions Inventory Branch of the Planning and Technical Support Division.

In support of the 2008 SJV $PM_{2.5}$ SIP, emission inputs for modeling were created for the period spanning the same 14 months studied under the California Regional $PM_{10}$/$PM_{2.5}$ Air Quality Study (CRPAQS). This period is from December 1, 1999 through January 31, 2001. The following sections of this document describe how base case and future year emissions estimates for modeling of this multi-month period were prepared.

# 2 PM2.5 EMISSION INVENTORY DEVELOPMENT

A great deal of work preceded the SJV $PM_{2.5}$ modeling effort through the Central California Air Quality Studies (CCAQS) as well as 1-hour and 8-hour ozone modeling. CCAQS consists of two studies: 1) the Central California Ozone Study (CCOS); and 2) the California Regional $PM_{10}$/$PM_{2.5}$ Air Quality Study (CRPAQS). More on CCAQS can be found at the following link:

http://www.arb.ca.gov/airways/

SIP modeling for ozone, which preceded $PM_{2.5}$ modeling, gleaned a great deal from CCAQS studies. Initially, for CCOS gridded inventory development, an Emission Inventory Coordination Group (CCOS EICG) was established in February 1999 to help coordinate the development of gridded inventories for CCOS-based ozone modeling. Participating in the group were many local air districts, regional transportation planning agencies (RTPAs), the California Department of Transportation (Caltrans), the California Energy Commission, the U.S. Environmental Protection Agency, and the ARB. Local air districts that participated included San Joaquin Valley APCD, Bay Area AQMD, Sacramento Metropolitan AQMD, Mendocino County APCD, Northern Sierra AQMD, Yolo/Solano AQMD, Placer County APCD, San Luis Obispo County APCD, and Monterey Bay Unified APCD. All local air districts in the CCOS region were invited to participate. The CCOS EICG coordinated six studies through CCOS to improve the emission inventory:

- Small district assistance with point source updates (Contract 00-22CCOS, UC Davis). Section 6.2.2.1.3 describes this project in more detail.

- Small district assistance with area source updates (Contract 00-24CCOS, Sonoma Technology, Inc). Section 6.2.2.1.3 describes this project in more detail.

- Collect day-specific traffic count data and develop hourly distributions (Contract 00-04PM, UC Davis). Section 6.2.7.6 provides more detail.

- Develop the Integrated Transportation Network (ITN) and run the Direct Travel Impact Model (DTIM) (Contract 93-2PM, Alpine Geophysics). Section 6.2.7.9 describes this project in more detail.

- Validate databases for modeling biogenic emissions (Contract 00-16CCOS, UC Cooperative Extension). Section 6.2.8 provides more detail.

- Develop spatial surrogates for gridding area and off-road sources (Contract 00-24CCOS, Sonoma Technology, Inc.). Section 6.2.9 describes this project in more detail.

The CCOS EICG met on a regular basis to discuss CCOS ozone emission inventory development issues into 2002. SIP modeling inventories became available for the regulatory 1-hour ozone SIPs using much of the information from CCOS. In February 2003, the Air Resources Board established a SIP Gridded Inventory Coordination Group (SIP-GICG). The SIP GICG consists primarily of government agencies and their contractors that are responsible for the variety of data used to develop gridded emission inventories for SIP purposes. Many of the same participants in the CCOS EICG participate in the SIP GICG. The purpose of the SIP GICG was to conduct quality assurance of the emissions, and to distribute and coordinate the development of emission inputs for SIP modeling. In February 2005, the focus was changed to inventory development for the 8-hour ozone SIPs. Minutes from the SIP GICG meetings are provided in Appendix A.

The SIP GICG did not met to discuss gridded inventory development for the annual $PM_{2.5}$ SIP modeling. However, the basis for gridded inventory development was largely established during the ozone modeling meetings. For the SJV $PM_{2.5}$ SIP gridded inventory development, discussions have been held directly with SJVAPCD staff.

## 2.1 Background

In order to understand how the modeling inventories are developed, it is necessary to understand the basics of how an annual average emission inventory is developed. California's emission inventory is an estimate of the amounts and types of pollutants emitted from thousands of industrial facilities, millions of motor vehicles, and of hundreds of millions of applications of other products such as paint and consumer products. The development and maintenance of the inventory is a multi-agency effort involving the ARB, 35 local air pollution control and air quality management districts (districts), regional transportation planning agencies (RTPAs), and the California Department of Transportation (Caltrans). The ARB is responsible for the compilation of the final, statewide emission inventory, and maintains this information in a complex electronic database. Each emission inventory reflects the best information available at the time.

To produce regulatory, countywide emissions estimates, the basic principle for estimating emissions is to multiply an estimated, per-unit emission factor by an estimate of typical usage or activity. For example, on-road motor vehicle emission factors are estimated for a specific vehicle type and model year based on dynamometer tests of a small sample of that vehicle type and applied to all applicable vehicles. The usage of those vehicles is based on an estimate of such activities as a typical driving pattern, number of vehicle starts, typical miles driven, and ambient temperature. It is assumed that all vehicles of this type in each region of the state are driven under similar conditions.

Developing emission estimates for stationary sources involves the use of per unit emission factors and activity levels. Under ideal conditions, facility-specific emission factors are determined from emission tests for a particular process at a facility. More commonly, a generic emission factor is developed by averaging the results of emission tests from similar processes at several different facilities. This generic factor is then used to estimate emissions from similar types of processes when a facility-specific emission factor is not available. Activity levels from point sources are measured in such terms as the amount of product produced, solvent used, or fuel used.

ARB maintains an electronic database of emissions and other useful information. Annual average emissions are stored for each county, air basin, and district. The database is called the California Emission Inventory Development and Reporting System (CEIDARS). Emissions are stored in CEIDARS for criteria and toxic pollutants. The criteria pollutants are total organic gases (TOG), carbon monoxide (CO), oxides of nitrogen (NOx), oxides of sulfur (SOx), and total particulate matter (PM). Reactive organic gases (ROG) and particulate matter 10 microns in diameter and smaller ($PM_{10}$) are calculated from TOG and PM, respectively. Following are more details on how emissions are estimated for point and area sources, on-road motor vehicles, and biogenic sources. Additional information on emission inventories can be found at:

http://www.arb.ca.gov/ei/ei.htm

## 2.2 Point and Area Source Emissions

### 2.2.1 Development of Base-Year Emission Inventory

The stationary source component of the emission inventory is comprised of more than 17,000 individual facilities, called “point sources”, and about 160 categories of “aggregated point sources”. Aggregated point sources are groupings of many small point sources that are reported as a single source category (gas stations, dry cleaners, and print shops are some examples). These emission estimates are based mostly on area source methodologies or emission models. Thus, the aggregated point sources include emissions data for the entire category of point sources, not each specific facility.

All districts report as point sources any facility with criteria pollutant emissions of 10 tons per year and greater. Some districts choose a cutoff smaller than 10 tons per year for reporting facilities as point sources. Any remaining sources not captured in the point source inventory are reported as aggregated point sources.

The area-wide source component includes several hundred source categories and is made up of sources of pollution mainly linked to the activity of people. Examples of these categories are emissions from consumer products, architectural coatings, pesticide applications, and wind-blown dust from agricultural lands. The emissions for these categories are located mostly within major population centers. Some of the emissions in these categories come from agricultural centers and construction sites.

The off-road mobile source inventory is based on the population, activity, and emissions estimates of the varied types of off-road equipment. The major categories of engines and vehicles include agricultural, construction, lawn and garden, and off-road recreation, and include equipment from hedge trimmers to cranes. ARB's OFFROAD model estimates the relative contribution of gasoline, diesel, compressed natural gas, and liquefied petroleum gas powered vehicles to the overall emissions inventory of the state. In previous versions of the inventory, emissions from the OFFROAD model were aggregated into about 100 broad categories. Since April 2006, the inventory reports emissions in about 1800 detailed categories that match what is produced by the OFFROAD model. Carrying this level of detail allows for more accurate application of control measures as well as more specific assignments of speciation and spatial distribution. For more information, see:

http://www.arb.ca.gov/msei/offroad/offroad.htm.

Local air districts estimate emissions from point sources. The districts provide point source information to ARB to update the annual average CEIDARS database. Estimating emissions from area sources is a cooperative effort between ARB and air district staffs. Updating the emission inventory is a continual process, as new information becomes available.

#### 2.2.1.1 Terminology

There can be confusion regarding the terms "point sources" and "area sources". Traditionally, these terms have had two different meanings to the developers of emissions inventories and the developers of modeling inventories. Table 2.2 summarizes the difference in the terms. Both sets of terms are used in this document. In modeling terminology, "point sources" refers to elevated emission sources that exit from a stack and have a potential plume rise. "Area sources" refers collectively to area-wide sources, stationary-aggregated sources, and other mobile sources (including aircraft, trains, ships, and all off-road vehicles and equipment). That is, "area sources" are low-level sources from a modeling perspective. In the development of the CCOS inventories, all point sources were treated as possible elevated sources. Processing of the inventory for the photochemical model will determine which vertical layer the emissions from a process will be placed into. So, for the CCOS modeling inventories, the use of the term “point sources” is the same whether using the modeling or emission inventory definition.

**Table 2.2 Inventory Terms**

| Modeling Term | Emission Inventory Term | Examples |
|---|---|---|
| Point | Stationary – Point Facilities | Stacks at Individual Facilities |
| Area | Off-Road Mobile | Farm Equipment, Construction Equipment, Aircraft, Trains |
| Area | Area-wide | Consumer Products, Architectural Coatings, Pesticides |
| Area | Stationary - Aggregated | Industrial Fuel Use |
| On-Road Motor Vehicles | On-Road Mobile | Automobiles |
| Biogenic | Biogenic | Trees |

### 2.2.1.2 Quality Assurance of Base Year Emissions

In order to prepare the best inventory possible for use in modeling, ARB and district staff devoted considerable time and effort to conduct quality assurance (QA) of the inventory. Staffs from many local districts, including the Bay Area AQMD, Monterey Bay Unified APCD, Sacramento Metro AQMD and San Joaquin Valley APCD conducted extensive quality assurance to provide an accurate and complete inventory. Districts in the southern part of California had recently completed a similar exercise to improve their inventories as part of the Southern California Ozone Study (SCOS).

In particular, facility location, stack data, and temporal data were closely checked. This information is critical whenever photochemical modeling is conducted, such as during SIP preparation or special studies such as CCOS. However these data are not always of sufficient quality in the inventory database since this information is not needed in the actual calculation of emissions and resources are limited. ARB ran several types of QA reports on the inventory to assist the districts in locating errors or incomplete information. This QA process began with the 1999 CEIDARS database that was used initially for CCOS and 1-hour ozone SIP inventory preparation. This QA process has continued with the 2002 CEIDARS database. This database is the basis for the modeling inventories developed for the annual $PM_{2.5}$ SIP as well as the 8-hour ozone SIP.

- Stack data – The report checks for missing or incorrect stack data. The report lists missing stack data and also checks the data for reasonable stack height, diameter, temperature, and stack velocity. Additionally, the report compares the reported stack flow rate with the computed theoretical flow rate (calculated using the diameter and stack velocity).

- Location data – The report checks for missing or wrong Universal Transverse Mercator) UTM coordinates. The report lists missing UTM coordinates for both facilities and stacks. UTM coordinates are also checked to ensure that they are in the range for a given county. Another report is also run that shows the UTM coordinates for a facility grouped by the city in which the facility is located. This allows staff to look for outliers that may indicate facilities whose locations are in the county, but not in the correct location. Additionally, ARB staff reviewed location coordinates for accuracy and completeness. Comparisons were made using address or zip code mapping.

- Temporal data – The report checks for missing or invalid temporal information. Temporal codes used to describe the hours per day, days per week, and weeks per year are checked for completeness, accuracy, and validity. The relative monthly throughput, which assigns a relative amount of activity to each month of the year, is checked to ensure the sum is 100%.

- Code Assignments – Source Classification Codes (SCC) and Standard Industrial Classification Codes (SIC) were reviewed for accuracy. The SCC is used to determine the speciation profile assigned (speciation is discussed in Section 6.10). The SIC and SCC combined determine which emission control rules may apply for forecasting emissions (see Section 6.3) along with the categorization of emissions for reporting purposes.

#### 2.2.1.3 Improvements to Base Year Emissions

In addition to the extensive QA checks described above, the CCOS Emission Inventory Coordination Group agreed to assist the small districts in the CCOS domain. Many small districts in the CCOS region have limited staff and resources to provide updated emission inventories to the ARB. After discussion with staff from districts in the Sacramento Valley and Mountain Counties Air Basins, two studies were decided upon. One study would focus on point sources and the second on area sources.

District staff said they did have emission estimates for their point source facilities, but that they did not have the resources to provide the data to ARB. The first study sent engineering students from UC Davis (Kleeman, 2000) to visit several districts to gather the emissions and related data for 1999. The students then put the information into ARB's CEIDARS database. Two teams containing three students and one ARB staff person each visited Amador County APCD, Butte County AQMD, Colusa County APCD, El Dorado County APCD, Feather River AQMD, Glenn County APCD, Northern Sierra AQMD, Placer County APCD, Shasta County AQMD, Tehama County APCD, Tuolumne County APCD, and Yolo/Solano AQMD. The results of this project have been incorporated into the 1999, 2000, and 2002 CEIDARS inventories.

For area sources, district staff said that the best way to provide assistance would be to have a contractor develop emission estimates for the area source categories for which the districts were responsible. The CCOS study contracted with Sonoma Technology, Inc. (STI) (Coe, 2003) to prepare revised emissions estimates. STI would format the emissions and related data for input into the CEIDARS database. District staffs have included these updates in the 2002 database. STI developed protocol memoranda that contained the following elements:

- Description of emission source
- Emission factors
- Activity data
- Emissions calculations, including a sample calculation
- Temporal allocation
- References and contacts

The protocols were pulled together from a variety of resources, including local air districts' past methods documents, U.S. Environmental Protection Agency documents, ARB documents, and original ideas based on the discovery of new information sources through library research, Internet research, and telephone contacts. Generally, STI attempted to incorporate data and information resources into the protocols that are readily available to the general public at no or low cost. And, while these methods and information resources are useful, it is recognized that it is more ideal to use highly customized or bottom-up emissions estimates when the costs of these efforts are warranted.

Emissions were estimated for the following counties: Amador, Butte, Calaveras, Colusa, E. Solano, El Dorado, Glenn, Mariposa, Mendocino, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Tuolumne, Yolo, and Yuba. Area source methodologies were developed for the following broad categories:

- Asphalt paving/roofing
- Chemical and related products manufacturing
- Cleaning and surface coatings and related process solvents
- Fuel combustion:
    - Commercial natural gas
    - Commercial liquid fuels
    - Industrial natural gas
    - Industrial liquid fuels
    - Unspecified
    - Resource recovery
    - Petroleum production
- Cooking
- Wastes (e.g. livestock waste and landfills)
- Food and agriculture
- Mineral and metal processes
- Miscellaneous processes (e.g. miscellaneous industrial processes)
- Petroleum marketing

The protocol memoranda can be found on a password-protected project web site (URL: www.sonomatech.com/ccosii/; user name: “ccosii”; password: “emissions”).

## 2.3 Forecasted Emissions

Air pollution programs have always depended on predictive models for gaining a better understanding of what the emissions will be in the future—these predictions are based on expectations of future economic conditions, population growth, and emission controls.

ARB’s model to forecast or backcast emissions is known as the California Emission Forecasting System (CEFS). The CEFS model is designed to generate year-specific emissions estimates for each county/air basin/district combination taking into account two factors: 1) the effects of growth and 2) the effects of adopted emission control rules. It does this by linking these growth and control factors directly to CEIDARS emission categories for a particular base year (2002 for this project). A key component of the model is the Rule Tracking Subsystem (RTS). The RTS was developed to link year-specific implementation of emission control rules to the emission process level. The emission process level is identified in one of two ways. For facilities, the Source Classification Code (SCC) and Standard Industrial Classification (SIC) are used. For all other sources, the Emission Inventory Code (EIC) is used. In total, the emission process level comprises more than 30,000 possible emission categories statewide.

### 2.3.1 Growth Factors

Growth factors are derived from county-specific economic activity profiles, population forecasts, and other socio/demographic activity. These data are obtained from a number of sources, such as:

- districts and local regional transportation planning agencies (RTPAs) when they are available
- economic activity studies contracted by the ARB
- demographic data such as population survey data from the California Department of Finance (DOF) and Vehicle Miles Traveled (VMT) data from the California Department of Transportation (Caltrans)

Growth profiles are typically associated with the type of industry and secondarily to the type of emission process. For point sources, economic output profiles by industrial sector are linked to the emission sources via SIC. For area-wide and aggregated point sources, other growth parameters such as population, dwelling units, and fuel usage may be used.

### 2.3.2 Control Factors

Control factors are derived from adopted State and Federal regulations and local district rules that impose emission reductions or a technological change on a particular emission process. These data are provided by the agencies responsible for overseeing the regulatory action for the particular emission categories affected. For example, the ARB staff develops the control factors for sectors regulated by the ARB, such as consumer products and clean fuels. The districts develop control factors for locally enforceable stationary source regulations that affect emissions from such equipment as internal combustion engines or power plant boilers. The Department of Pesticide Regulation (DPR) supplies control data for pesticides. In general, control factors account for three variables:

- *Control Efficiency* which estimates the technological efficiency of the abatement strategy
- *Rule Effectiveness* which estimates the “real-world” application of the strategy taking into account factors such as operational variations and upsets
- *Rule Penetration* which estimates the degree a control strategy will penetrate a certain regulated sector taking into account such things as equipment exemptions.

Control factors are closely linked to the type of emission process and secondarily to the type of industry. Control levels are assigned to emission categories, which are targeted by the rules via emission inventory codes (SCC/SIC, EIC etc.) that are used in CEIDARS.

## 2.4 Day-Specific Emissions

In previous modeling efforts, day-specific emissions have been included when available for sources such as shipping and wildfires. No day-specific data were included at this time.

## 2.5 *Temporally and Spatially Resolved Emissions*

In addition to forecasting emissions, CEFS can create temporally resolved inventories for modeling purposes, for the base year and future years. The annual average emissions are adjusted to account for monthly and weekly variations. CEFS generates an inventory for point and area sources (including off-road mobile sources) for a weekday and a weekend day in the year and months needed for an episode (e.g. July 1999 or August 2000). Emissions are estimated for each county, air basin, and district combination. In addition, information on how the daily emissions are distributed to each hour of the day is provided for later incorporation.

The emission inventories for CCOS were developed from the 2002 annual average CEIDARS inventory for TOG, NOx, $SO_X$, CO, PM, and ammonia. Since the episodes to be modeled (1999 and 2000) were earlier than the inventory base year (2002), emissions were backcasted from 2002 (see Section 6.2.3 for more information on forecasting emissions). Inventories for point and area sources were developed for a weekday and a weekend day for each of the 12 months for all years from 1990 to 2030. Note that all of these years may not have been processed into the formats needed for input to air quality models.

The backcasting of emissions for point and area sources uses the best available data. Backcasting is handled differently for point and area sources. Point sources use historical data as stored in that year's CEIDARS inventory. In other words, the 1999 point source emissions come from the 1999 CEIDARS database and the 2000 point source emissions come from the 2000 CEIDARS database. Area source emissions are backcast from 2002 using growth and control factors. This procedure allows emissions to reflect changes that may have occurred due to updated emission calculation methodologies.

## 2.6 *Surface Temperature and Relative Humidity Fields*

The calculation of gridded emissions for some categories of the emissions inventory is dependent on gridded air temperature (T), relative humidity (RH), and solar radiation fields. Biogenic emissions are sensitive to air temperatures and solar radiation, and emissions from on-road mobile sources are sensitive to air temperature and relative humidity. Gridded temperature, humidity, and radiation fields are readily available from prognostic meteorological models such as MM5, used to prepare meteorological inputs for the air quality model. However, analysis of the MM5 outputs prepared for the July-August 2000 episode revealed poor agreement between simulated humidity and temperature fields and the available measurements.

As an alternative to the data fields generated using the prognostic meteorological model, air temperature and humidity fields for calculation of the emission inventory were prepared by objective analysis. In the objective analysis, hourly temperatures for each grid cell within the study domain were calculated using a distance-weighted average of the nearest three temperature measurements. Because few temperature measurements were available at higher terrain elevations, temperatures were adjusted using a vertical lapse rate (-0.0098 C/m to -0.0065 C/m) multiplied by elevation differences prior to averaging. Since this is an assumed constant, there may be uncertainty in temperatures at higher elevations.

Relative humidity measurements show a wide range of variability. Within the CCOS study domain, it was not unusual to find differences in relative humidity of 40% among sites within a 25-kilometer radius. To reduce large horizontal variations in the relative humidity fields developed for the emission inventory calculations, relative humidity fields were calculated assuming a daily constant absolute humidity for each grid cell. The absolute humidity was calculated from the minimum daily temperature and assuming a maximum daily relative humidity of 80%.

The solar radiation fields needed for biogenic emission inventory calculations were taken from MM5 results.

## 2.7 *On-Road Mobile Source Emissions*

EMFAC is the ARB approved on-road motor vehicle emission inventory model.. Modeling work to date has been done using EMFAC Working Draft 2 version 2.24.6 for on-road motor vehicle emissions development. This version of EMFAC was a working version that was between EMFAC2002 v2.2 (April 2003), used in previous modeling work, and EMFAC2007 v2.3, the current version. EMFAC Working Draft 2 v2.24.6 is similar to EMFAC2007 v2.3. Modeling work had already begun with the Working Draft 2 when EMFAC2007 v2.3 became available. In order to remain consistent and not bias modeling results due to a change in inventory inputs, EMFAC Working Draft 2 has continued to be used.

Here are the main areas of change between the last version of EMFAC, EMFAC2002, and EMFAC Working Draft 2 version 2.24.6/EMFAC2007:

Diesel Vehicles:

- Redistribution of heavy-duty diesel vehicle miles traveled (VMT)
- Adjustment to heavy-duty diesel emission factors
- Modifications to the speed correction factors for heavy-duty diesel vehicles
- The inclusion of high idle emission rates for heavy-duty diesel vehicles
- Diesel fuel correction factors

Gasoline Vehicles

- The impact of ethanol in gasoline on evaporative emissions
- Addition of areas into the Enhanced Smog Check program

The EMFAC model provides emission estimates for 13 classes of vehicles for exhaust, evaporation, and PM emissions from tire wear and brake wear. EMFAC also produces estimates of fuel consumption, vehicle miles traveled (VMT), and the number of vehicles in use. EMFAC does not output a gridded emission file. However, EMFAC will produce a file of emission rates that can be used with the Direct Travel Impact Model (DTIM) or other external on-road motor vehicle emission gridding program. These same emission rates are part of the information used by EMFAC to produce emission estimates for California counties or air basins.

DTIM4 (Systems Applications, Inc. 2001) is the latest version of DTIM, and is used to estimate gridded on-road motor vehicle emissions. In addition to the EMFAC emission rate file, DTIM4 uses digitized roadway segments (links) and traffic analysis zone activity centroids to allocate emissions for travel and trip ends. DTIM4 gridded emission files have fewer categories than EMFAC outputs. Each DTIM4 output category will be used to spatially allocate emissions for several EMFAC emission categories. There are also several categories of emissions that EMFAC produces that are not estimated by DTIM4.

DTIM4 is used to estimate both the spatial and temporal distribution of all on-road motor vehicle emissions. It is important to recognize that EMFAC (and its associated activity), and not DTIM, is used to calculate county-specific emissions. DTIM output, using the Integrated Transportation Network (ITN) activity as inputs, was used to create hourly emission *ratios* for each grid cell in a county. These ratios were used to distribute county-specific, daily EMFAC emissions to each hour and grid cell. A horizontal grid resolution of 4 x 4 km is used.

Below we describe the procedures that were used with EMFAC Working Draft 2 version 2.24.6 and DTIM4 to produce day-specific gridded on-road motor vehicle emission estimates. Any general references to EMFAC in the remainder of this chapter refers to EMFAC Working Draft 2 version 2.24.6 for the $PM_{2.5}$ modeling work in Central California. Likewise, any general references to DTIM refers to DTIM4. The procedures described here are carried out separately for each county in the CCOS modeling domain.

### 2.7.1 EMFAC Emissions Categories

EMFAC Working Draft 2 version 2.24.6 produces emission estimates for the following 13 vehicle classes:

1. LDA Light Duty Autos
2. LDT1 Light Duty Trucks < 3,750 pounds GVW
3. LDT2 Light Duty Trucks > 3,750 - 5,750
4. MDV Medium Duty Vehicles > 5,750 – 8,500
5. LHD1 Light Heavy Duty Vehicles > 8,500 – 10,000
6. LHD2 Light Heavy Duty Vehicles > 10,000 – 14,000
7. MHD Medium Heavy Duty Vehicles > 14,000 – 33,000
8. HHD Heavy Heavy Duty Vehicles > 33,000
9. OB Other Buses
10. SBUS School Buses
11. UBUS Urban Buses
12. MH Motorhomes
13. MCY Motorcycles

Additionally, there are up to 3 technology groups within each vehicle type:

1. Catalyst
2. Non-catalyst
3. Diesel

For each of the combinations of vehicle type and technology there can be many emission categories:

1. Start Exhaust
2. Running Exhaust
3. Idle Exhaust
4. Hot Soak
5. Running Evaporatives
6. Resting Evaporatives
7. Partial Day Resting Evaporatives
8. Multi-Day Resting Evaporatives
9. Diurnal Evaporatives
10. Partial Day Diurnal Evaporatives
11. Multi-Day Diurnal Evaporatives
12. Break Wear PM
13. Tire Wear PM

A DTIM4 preprocessor calculates fleet average emission factors for each EMFAC technology type for each emission category. The vehicle type distribution used to calculate fleet emission factors is an input, so it can be varied as needed.

### 2.7.2 DTIM4 Emissions Categories

During DTIM4 operation, all emissions are collapsed into a total of 40 emission categories, represented by the SCCs below, which depend on vehicle type, the technology, and whether the vehicle is catalyst, non-catalyst, or diesel. Light- and medium-duty vehicles are separated from heavy-duty vehicles to allow for separate reporting and control strategy applications.

| SCC for Light-duty and Medium-duty Vehicles | SCC for Heavy-Duty Vehicles | Description |
|---|---|---|
| 202 | 302 | Catalyst Start Exhaust |
| 203 | 303 | Catalyst Running Exhaust |
| 204 | 304 | Non-catalyst Start Exhaust |
| 205 | 305 | Non-catalyst Running Exhaust |
| 206 | 306 | Hot Soak |
| 207 | 307 | Diurnal Evaporatives |
| 208 | 308 | Diesel Exhaust |
| 209 | 309 | Running Evaporatives |
| 210 | 310 | Resting Evaporatives |
| 211 | 311 | Multi-Day Resting |
| 212 | 312 | Multi-Day Diurnal |
| 213 | 313 | PM Tire Wear |
| 214 | 314 | PM Brake Wear |
| 215 | 315 | Catalyst Buses |
| 216 | 316 | Non-catalyst Buses |
| 217 | 317 | Diesel Bus |
| 218 | 318 | Catalyst Idle |
| 219 | 319 | Non-catalyst Idle |
| 220 | 320 | Diesel Idle |
| 221 | 321 | PM Road Dust |

### 2.7.3 Creating the Emission Rate File

EMFAC will create an emission rate file for any desired combination of vehicle speeds, ambient temperatures, and relative humidities (RH). However, DTIM4 places restrictions on the total array size. The sets of values we use to build the array are:

Speed: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65

Temp: 30, 45, 60, 70, 75, 80, 85, 90, 100, 110

RH: 0, 30, 50, 70, 80, 90, 100

#### 2.7.3.1 Day-Specific EMFAC Inventories

Emission estimates are produced by EMFAC for each day of each episode, by county. County average hourly temperatures, weighted by gridded VMT, are input to EMFAC to produce a ‘BURDEN’ inventory in a comma separated (.bcd) format. Both DTIM4 exhaust and evaporative emissions are scaled by category to the EMFAC emissions estimates for each county/air basin area. EMFAC bus and idle emission categories are not estimated by DTIM4. These categories are added to the gridded emission files.

#### 2.7.3.2 Emissions Gridding

The method to estimate on-road mobile emissions at the grid cell level is described briefly in the following five steps:

> Step 1. Gridded, hourly temperature (T) and relative humidity (RH) fields for each episode day are prepared for input to DTIM4. The T and RH fields are derived either from meteorological model predictions, observations, or some hybrid combination of model predictions and observations.
>
> Step 2. EMFAC is run to prepare on-road mobile source emission factors by speed, temperatures, and relative humidity for each county.
>
> Step 3. DTIM4 is run using data from the Integrated Transportation Network version 2 (ITNv2) and EMFAC to estimate gridded, hourly on-road mobile source emission estimates by day for DTIM4 categories.
>
> Step 4. EMFAC is run again using episode-specific T and RH data to provide countywide on-road mobile source emission estimates by day for EMFAC categories. The episode-specific meteorological inputs for EMFAC are generated

via averaging (VMT-weighted) the gridded, hourly meteorology from Step1 by county and hour.

Step 5. Two sub-steps are taken:

Temporal adjustments

5a Sum the hourly volumes by vehicle type and county on the ITNv2 network.

5b For heavy-duty vehicles on core days (Tuesday through Thursday) redistribute the hourly emissions but make no daily VMT adjustment. Light duty vehicle emissions from EMFAC will not be adjusted at all for core days.

5c For Friday, Saturday, Sunday, and Monday, use Caltrans count data to develop a set of ratios of Caltrans daily VMT to core days. For example, develop ratios for Saturday to Tues-Thurs. Develop ratios for each Caltrans district for passenger cars, light and medium duty trucks, and heavy-duty trucks.

5d Apply Caltrans daily factors by county, and secondly, apply Caltrans' new hourly distributions by county to ITNv2 link activity.

5e Run DTIM with revised ITNv2 activity.

5f Run EMFAC with day-specific temperatures.

5g Adjust DTIM output emissions to EMFAC weekday by county.

5h For Friday, Saturday, Sunday, and Monday, apply daily ratios from step 5c to hourly DTIM emissions by county.

See Section 6.7.6 for more information.

Spatial/Temporal Distribution EMFAC daily, countywide emissions (adjusted for weekend days, if needed), are disaggregated by category into grid-cells for each hour of the day using the DTIM4 output (Step 3) as a spatial and temporal surrogate.

The disaggregation follows the equation:

$$E_{P,ij,hr,cat} = \frac{EF_{P,cat} \times DTIM_{P,ij,hr,cat}}{DTIM_{P,daily,cat,cnty}}$$

where:

| | |
|---|---|
| E | = grid cell emissions |
| EF | = EMFAC emissions |
| DTIM | = DTIM emissions |
| P | = pollutant |
| ij | = grid cell |
| hr | = hourly emissions |
| cat | = Emission Category |
| daily | = daily emissions |
| cnty | = county |

#### 2.7.3.3 Suggested Improvements for On-road Motor Vehicle Gridding

The five step process described above in section 6.7.5 is used to generate sets of day-specific, gridded on-road emissions. These emissions are our best estimates at the present time; however additional work in three areas would improve the estimates. One area of improvement, and likely the most important, is in the allocation of heavy-duty truck emissions. At present, the only transportation modeling done to explicitly model trucks is for Southern California counties covered by the Southern California Association of Governments (SCAG). For the remaining counties, heavy-duty trucks are assigned as a ratio of light-duty vehicles.

A second area of improvement is in developing emissions for weekend days. Both the spatial and temporal distribution of on-road motor vehicle emissions is different on weekend days than on weekdays. On-road motor vehicle emissions on weekend days should be considered an approximation since there are no transportation models to describe weekend traffic. In other words, people are still traveling to work; the emissions are just scaled down.

A third area of improvement is determining the hourly emissions from on-road motor vehicles. Local regional transportation agencies (RTPAs) and Caltrans supply traffic estimates for several time periods in a day. In the development of previous modeling inventories for CCOS, traffic within the time period was allocated to each hour using the hourly profiles that were developed by UC Davis. (Lam 2002). UC Davis developed two hourly profiles, one for weekdays and one for weekend days, which differed by county. However, there was no distinction by vehicle class. The same hourly profile was used for heavy-duty vehicles as for light-duty vehicles within a county. This is of concern because trucks are known to have different diurnal distributions than cars and they have high NOx emissions.

Due to this concern, the Weekend Truck Subcommittee of the northern California SIP Gridded Inventory Coordination Group (GICG) was formed in 2004 to investigate a way to improve day-of-week adjustments, for vehicle types as needed, but particularly for heavy-duty trucks. Participants in the subcommittee are members of the GICG with particular knowledge and/or interest in improving the adjustment factors and include representatives from Caltrans, ARB, Bay Area AQMD, San Joaquin Valley APCD, and Alpine Geophysics (the developer of the ITN).

Caltrans staff acquired Automatic Vehicle Classifier (AVC) count data from about 139 sites in the state for calendar year 2004 (see Figure 2.1). Caltrans staff prepared hourly day of week factors for (1) passenger cars (LD), (2) light and medium duty trucks (LM), and (3) heavy-heavy duty trucks (HHDT). Caltrans count data are separated using the Federal Highway Administration (FHWA) vehicle classification scheme (see Table 2.3). Passenger cars are defined as FHWA classes 1 through 3. Light and medium heavy-duty trucks are defined as FHWA classes 7 and 8. Heavy-heavy duty trucks are defined as FHWA classes 9 through 14. Separate factors were prepared for each Caltrans District. One or more counties may fall into a single District. All counties within each Caltrans district will receive the same adjustment. Figure 2.2 shows a map of county and Caltrans district boundaries. Only counts during the summer of 2004 were used, specifically the months of June, July and August excluding data from July 2-5 to remove unusual traffic patterns around the July 4$^{th}$ holiday.

Temporal on-road activity adjustments by county were made for:

1. Heavy duty vehicles – all days
2. Light-duty vehicles – Friday, Saturday, Sunday, Monday

Daily total activity (daily VMT) adjustments were made for all vehicle types for Friday, Saturday, Sunday, and Monday. Tuesday, Wednesday, and Thursday are considered as one day. Adjustments applied to heavy-duty vehicles on Tuesdays, Wednesdays, and Thursdays were the same for each of the three days.

Since it is EMFAC emission estimates that are being adjusted to derive the final on-road inventory, the relation between EMFAC vehicle classes and Caltrans' adjustment factors is shown below.

| EMFAC Class | Description | Caltrans' Factor |
|---|---|---|
| 1 | LDA | LD |
| 2 | LDT1 | LD |
| 3 | LDT2 | LD |
| 4 | MDV | LD |
| 5 | LHDT1 | LM |
| 6 | LHDT2 | LM |
| 7 | MHDT | LM |
| 8 | HHDT | HHDT |
| 9 | Other Bus | No data in ITNv2 |
| 10 | School Bus | Unadjusted on weekdays, zero on weekend days |
| 11 | Urban Bus | LD |
| 12 | Motorhomes | LD |
| 13 | Motorcycles | LD |

where LD based on count data for FhwA classes 1 through 3

LM based on count data for FhwA classes 7 and 8

HHDT based on count data for FhwA classes 9 through 14

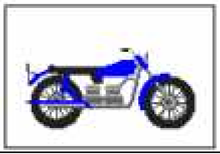
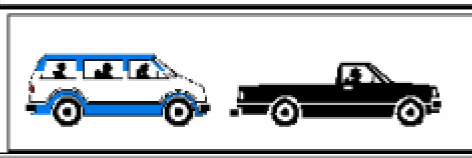
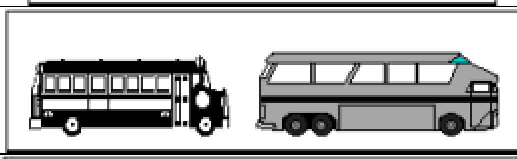
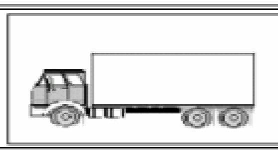
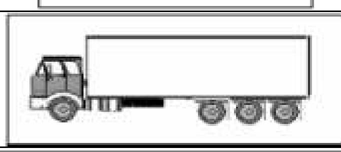
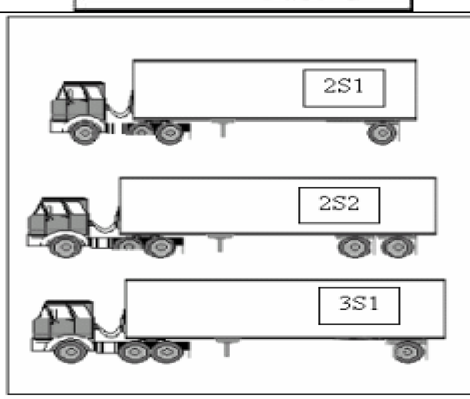
To summarize, for core days light- and medium-duty vehicle emissions will equal EMFAC emissions by county and hour. For core days, heavy-duty emissions will equal EMFAC but have Caltrans hourly distribution. For Friday through Monday, EMFAC weekday emissions will be scaled to reflect Caltrans day of week factors. Appendix C provides more detail on the methodology developed by the Weekend Truck Subcommittee.

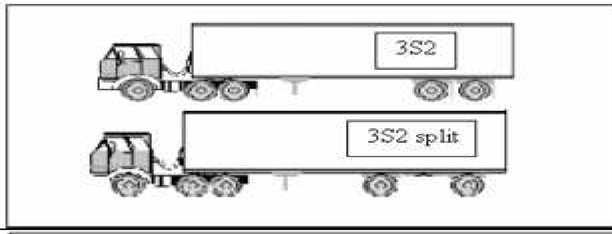
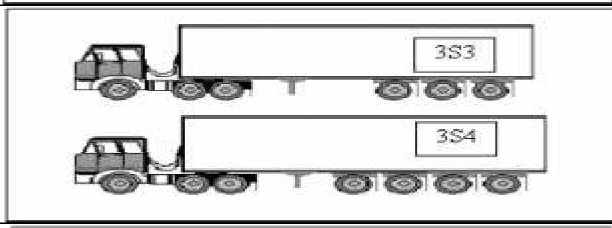
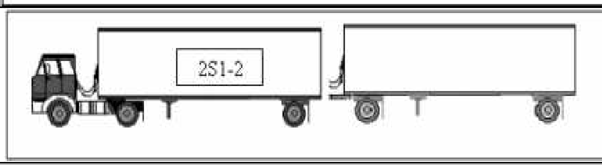
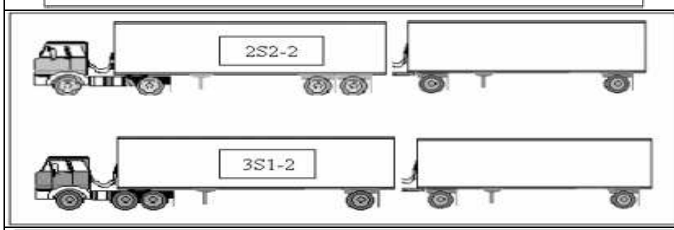
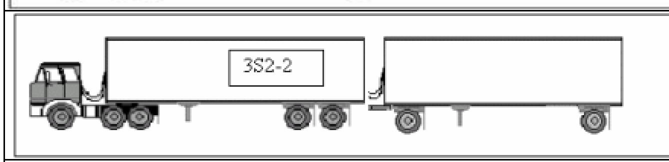
Although significant improvements have been made to improve the temporal distribution of on-road motor vehicles, some assumptions were made that may cause uncertainty in the adjustments. For example, one assumption is that the count data represent the temporal distribution of all road types, including local roads. The count data are gathered only on state highways. Another assumption is the link between EMFAC and FHWA classes. EMFAC classes are based on gross vehicle weight, whereas FHWA classes are based on type of vehicle and number of axles. It is not an easy process to determine which EMFAC class a specific type of vehicle falls into based on the number of axles, particularly for trucks. Additional work may provide improvements to estimating hourly emissions by vehicle type, especially on weekend days.


**Figure 2.1 Caltrans Weigh-In-Motion Data Sites**


**Figure 2.2 Caltrans District and County Boundaries**

## Table 2.3 Federal Highway Administration (FHwA) Vehicle Classification

| Graphic Depiction | FHWA Class | Description |
|---|---|---|
|  | 1 | Motorcycles |
|  | 2 | Passenger Cars (With 1- or 2-Axle Trailers) |
|  | 3 | 2 Axles, 4-Tire Single Units, Pickup or Van (With 1- or 2-Axle Trailers) |
|  | 4 | Buses |
|  | 5 | 2D - 2 Axles, 6-Tire Single Units (Includes Handicappe-Equipped Bus and Mini School Bus) |
|  | 6 | 3 Axles, Single Unit |
|  | 7 | 4 or More Axles, Single Unit |
|   | 8 | 3 to 4 Axles, Single Trailer |

| Graphic Depiction | FHWA Class | Description |
|---|---|---|
|  | 9 | 5 Axles, Single Trailer |
|  | 10 | 6 or More Axles, Single Trailer |
|  | 11 | 5 or Less Axles, Multi-Trailers |
|  | 12 | 6 Axles, Multi-Trailers |
|  | 13 | 7 Axles, Multi-Trailers |
| No graphic available | 14 | 5 Axles: 3 axle tractor pulling a 2 axle trailer (FHWA considers this type of truck a class 9;Caltrans counts these trucks separately for operational purposes.) |

#### 2.7.3.4 Fleet Emission Factors

An important input to DTIM4 is the vehicle type weighting for emission rate. The vehicle type VMT for each county/air basin output from EMFAC is used, which is then reformatted by the CONVIRS4 computer program and composited by vehicle type distribution from BURDEN in the IRS4 computer program. For the counties in CCOS that are covered by the ITN network, we process light/medium duty (LM) and heavy-duty vehicles (HDV) separately. The VMT for LM is the sum of EMFAC categories LDA, LDT1, LDT2, MDV, SBUS, UB, MCY and MH. The HDV VMT is the sum of LHD1, LHD2, MHD and HHD.

Besides the composite emission rate file, DTIM4 needs link and trip end activity files. All activity has been resolved to one-hour periods for each county using the method described in Sections 6.7.5 and 6.7.6 above. Specifically, temporal on-road activity (link and trip end) adjustments by county were made for:

- Heavy duty vehicles – all days
- Light-duty vehicles – Friday, Saturday, Sunday, Monday

Link and trip end activity adjustments were made for all vehicle types for Friday, Saturday, Sunday, and Monday. Tuesday, Wednesday, and Thursday are considered as one day. Adjustments applied to heavy-duty vehicles on Tuesdays, Wednesdays, and Thursdays were the same for each of the three days.

Additionally, EMFAC has different fleet mixes by county based on vehicle registrations. It is the fleet mixes in EMFAC that ultimately are the basis for the on-road mobile source emissions processing that has been done in support of CCOS. The fleet mixes in the DTIM4 runs are based on the fleet mixes in EMFAC. The DTIM4 runs are based on the composite emissions factors that are generated by EMFAC. During the preprocessing of the EMFAC output, which occurs prior to a complete DTIM4 run that is performed by the IRS/CONVIRS programs, there is generally an adjustment applied to the EMFAC emissions factors based on vehicle counts. In most cases, the regional transportation planning agencies (RTPAs) who supplied the transportation data provided the vehicle counts that were used to adjust the EMFAC emissions factors. In the remaining cases, the vehicle count data were taken directly from EMFAC.

### 2.7.3.5 Differences Between DTIM4 and EMFAC

#### *2.7.3.5.1 Evaporative Emissions*

DTIM4 and EMFAC use different methods to estimate evaporative emissions. However, as mentioned previously, we use the DTIM4 evaporative emissions as spatial and temporal “surrogates” to resolve EMFAC emission estimates. During processing, we drop the DTIM4 evaporative categories 211, 212, 311, and 312 (because those emissions are included in EMFAC’s estimates for diurnal and resting emissions) and put all EMFAC resting emissions in DTIM4 category 210/310, and all diurnal emissions in DTIM4 category 207/307.

#### *2.7.3.5.2 Exhaust Emissions*

The exhaust emissions from EMFAC are also resolved spatially and temporally by DTIM4 emission estimates. Since transportation models do not estimate VMT for buses or excess idling categories, these are added to DTIM4 emissions. The exhaust CO, NOx, SOx, and PM emissions that DTIM4 allocates to category 1 are reassigned to catalyst starts, non-catalyst starts, catalyst stabilized, non-catalyst stabilized, and diesel exhaust categories according to the appropriate day-specific EMFAC inventory.

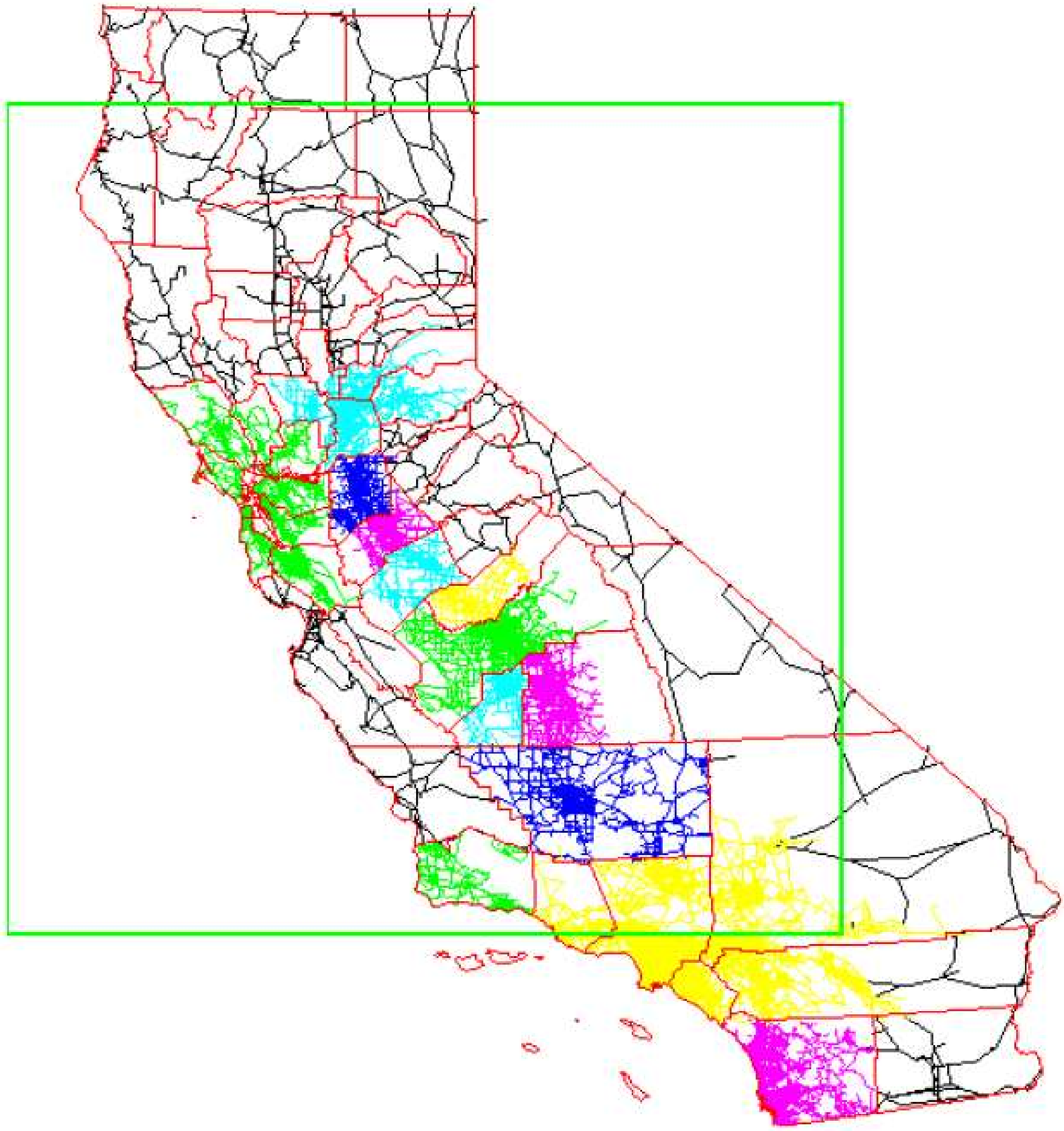
### 2.7.3.6 Integrated Transportation Network (ITN)

The Integrated Transportation Network (Wilkinson 2003) is a seamless on-road transportation network that covers all of California. The ITN was developed from many regional transportation planning agencies (RTPAs) as well as the California Department of Transportation (Caltrans) Statewide Model. The San Joaquin Valleywide Air Pollution Study Agency and Air Resources Board contracted with Alpine Geophysics to develop the ITN. After the ITN was developed, additional local transportation networks became available that were not included in the first version. Some RTPAs had also updated their networks since the original development. For these reasons, version two of the ITN (ITNv2.0) was developed (Wilkinson 2005). As mentioned earlier, the ITNv2.0 is used to spatially distribute the on-road mobile source emissions generated by EMFAC. Figure 2.3 shows the link-based ITNv2.0 for California.

Local networks were used for all or portions of the following counties: Alameda, Contra Costa, El Dorado, Fresno, Kern, Kings, Los Angeles, Madera, Marin, Merced, Napa, Orange, Placer, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Mateo, Santa Barbara, Santa Clara, Solano, Sonoma, Stanislaus, Sutter, Tulare, Ventura, and Yolo. Data that were provided for Imperial and San Luis Obispo could not be used because the parameters to conflate the networks to real world coordinates were not available.  The Caltrans statewide model was used to supplement the local data.  More details on the ITNv2.0 can be found in Appendix D, the final report "Development of Version Two of the California Integrated Transportation Network (ITN)".

It is important to recognize that EMFAC (and the associated activity), and not DTIM4, will be used to calculate county-specific emissions.  DTIM4 output, using the ITN activity as inputs, will simply be used to create hourly emission *ratios* for each grid-cell in a county.  These ratios will be used to distribute county-specific, daily EMFAC emissions to each hour and grid-cell.  This intended use negates the need to update countywide VMT on the ITN.  That is, if up-to-date VMT in a specific county were 10% higher than is currently reflected in the ITN, all the VMT on ITN links for that county would be increased by 10%.  Since both the county VMT and link VMT (in the same county) are factored by the same amount, the ratio of link-to-county VMT for every link in that county does not change.  Similarly, DTIM4 grid-cell-to-county emissions *ratios* do not change.  Thus, for the intended use and assuming no changes to ITN activity distribution, adjusting the ITN county totals to more accurate countywide VMT will not affect the outcome.

With regard to the spatial accuracy of the ITN, it is important to recognize that current modeling efforts in the region utilize square grid cells that are four kilometers on each side.  Thus, the spatial accuracy of the statewide or local components of the ITN only requires enough resolution to distribute EMFAC emissions into the proper four by four kilometers grid cell.  Given that the intended purpose of the ITN is for use in estimating on-road mobile source emissions for photochemical modeling efforts, this accuracy is sufficient.



Note: The county boundaries are in red. The Caltrans statewide network is in black. The various individual networks are in colors other than black or red. The 190 x 190 4 kilometer CCOS emissions modeling domain is shown as the green box.

**Figure 2.3. Link-based Integrated Transportation Network (ITN) version 2.0**

#### 2.7.3.7 Motor Vehicle Activity

Motor vehicle activity data are an important part of EMFAC for estimating emissions. As part of an on-going effort to use the best data available, ARB periodically updates the vehicle miles traveled (VMT) and speed distributions by VMT used in the model. In November 2004, ARB sent letters to transportation planning agencies (TPAs) statewide requesting updated activity data for base years and forecasted years. A sample letter can be found in Appendix E. All major urban areas in the state responded. The data was reviewed and processed by ARB staff in coordination with the TPAs. ARB's Technical Memorandum on the activity data update is provided in Appendix F. The memorandum provides summaries of the data and refers to supporting documents that provide additional details as well as discussions of issues. ARB included additional updates as time permitted before finalizing EMFAC2007.

#### 2.7.3.8 Forecasted Emissions for On-Road Motor Vehicles

Forecasted modeling inventories were developed for on-road motor vehicles as needed to complete the inventory inputs to episodes being modeled. For future year inventories, emissions and other needed data were taken from EMFAC for the desired future year. The method used to calculate the future year emissions was the same as the base year for each episode, including the same gridded, hourly temperature and relative humidity information.

#### 2.7.3.9 Known Problems

There are a number of spikes in the on-road vehicle emissions files. These appear in several of the lumped hydrocarbon emission species (ALK3, ALK4, ALK5, OLE1, OLE2, and ARO1) in a variety of grid cells and hours. This problem is evident in the hourly DTIM processing. That is, for some hours, there appear to be fewer links with activity, which cause the hourly EMFAC emissions to be concentrated on a smaller number of links than adjacent hours. In previous modeling work, ARB staff started with daily emissions and disaggregated them by hour. Now ARB staff begins with hourly EMFAC emissions, causing more variability in the outputs.

## 2.8 *Biogenic Emissions*

Development of effective ozone control strategies in California requires accurate emission inventories, including biogenic volatile organic compounds (BVOCs) such as isoprene and monoterpenes. Due to the heterogeneity of vegetation land cover, species composition, and leaf mass distribution in California, quantifying BVOC emissions in this domain requires an emission inventory model with region-specific input databases and a high degree of spatial and temporal resolution. In response to this need, the California Air Resources Board (CARB) has developed a Geographic Information System (GIS)-based model for estimating BVOC emissions, called BEIGIS, which uses California-specific input databases with a minimum spatial resolution of 1 square kilometer ($km^2$) and an hourly temporal resolution.

The BEIGIS isoprene emission algorithm (Guenther et al. 1991, 1993) is of the form

$$I = I_S \times C_L \times C_T$$

where I is the isoprene emission rate (grams per gram dry leaf mass per hour) at temperature T and photosynthetically active radiation flux PAR. $I_S$ is a base emission rate (grams per gram dry leaf mass per hour) at a standard temperature of 30 °C and PAR flux of 1000 $\mu mol\ m^{-2}s^{-1}$. $C_L$ and $C_T$ are environmental adjustment functions for PAR and temperature, respectively. The monoterpene emission algorithm adjusts a base monoterpene emission rate by a temperature function (Guenther et al. 1993). Methylbutenol (MBO) emissions are modeled with an algorithm developed by Harley et al. (1998) similar to that for isoprene. Dry leaf mass/leaf area ratios, and base emission rates for isoprene, monoterpenes, and MBO are plant species-specific and assembled from the scientific literature. Modeled BVOC emissions for a given spatial domain therefore represent the contribution by various plant species (through their leaf mass and emission rates) to the total BVOC emissions.

The main inputs to BEIGIS are land use and vegetation land cover maps, gridded leaf area indices (LAI) derived from AVHRR satellite data (Nikolov 1999), leaf area/dry leaf mass factors, base emission rates, and gridded hourly ambient temperature and light intensity data (from a meteorological model). For urban areas, land use/vegetation land cover databases were developed from regional planning agency data and botanical surveys (Horie et al. 1990; Nowak 1991; Sidawi and Horie 1992; Benjamin et al. 1996, 1997; McPherson et al. 1998). Natural areas are represented using the GAP vegetation database (also satellite-derived and air photo interpreted) developed by the U.S.G.S. Gap Analysis Program (Davis et al. 1995). Agricultural areas are represented using crop land cover databases developed by the California Department of Water Resources (http://www.waterplan.water.ca.gov). Ground surveys have been funded by CCOS to validate the vegetation land cover and LAI input databases used in BEIGIS (Winer et al. 1998; Karlik and McKay 1999; Winer and Karlik 2001, Karlik 2002). Validation using flux measurements in the field is on going.

Using BEIGIS, the ARB developed hourly-resolved, gridded emissions of isoprene, monoterpenes, methyl butanol (MBO), and other volatile organic compounds (OVOC) for the modeled periods. For a more detailed description of the estimation of biogenic emissions, see Appendix G.

Biogenic emissions are not estimated for future years because future inputs to BEIGIS, such as changes in climate and land use/land cover, are highly uncertain.

Photochemical modeling for future years uses the biogenic emissions developed for the base year.

## 2.9 *Spatial Allocation*

Once the base year or future year inventories are developed, as described in the previous sections, the next step of modeling inventory development is to spatially allocate the emissions. Air quality modeling attempts to replicate the physical and chemical processes that occur in an inventory domain. Therefore, it is important that the physical location of emissions be specified as accurately as possible. Ideally, the actual location of all emissions would be known exactly. In reality, however, the spatial allocation of emissions in a modeling inventory only approximates the actual location of emissions.

Before any spatial allocation can be performed, the modeling grid domain must be defined. A modeling grid domain is a rectangular area that is sufficient in size to contain all emission sources that could affect modeling results. The definition of the CCOS modeling domain is described below in Section 6.9.1.

Once a grid is defined, the spatial allocation of emissions can be performed. Each area source category is assigned a spatial surrogate that is used to allocate emissions to a grid cell. Examples of surrogates include population, land use, and other data with known geographic distributions for allocating emissions to grid cells. Section 6.9.2 discusses in detail the spatial surrogates developed for CCOS.

Point sources are allocated to grid cells using the UTM coordinates reported for each stack. If there are no stack UTM coordinates, the facility UTM coordinates are used. When location data are not reported, the county centroid is used.

Emissions are also distributed vertically into their proper layer in the air quality model. The vertical layer is determined from the calculation of buoyancy for those emissions that are released from an elevated height with a significant upward velocity and/or buoyancy. Most vertical allocation is from significant point sources with stacks. In most modeling exercises, low-level point sources are screened out at this point and placed with the area sources. However, in this modeling exercise, all point sources from the inventory were kept as possible elevated sources. The air quality model will then place the point sources in the appropriate layer of the model. Additionally in this modeling exercise, day-specific wildfire emissions were also distributed vertically. Please refer to section 6.4.4 and Appendix C for more information.

The spatial treatment of area and point sources has been described above. The spatial allocation of on-road motor vehicles is based on activity on the Integrated Transportation Network version 2 (ITNv2.0) as described in Section 6.7.9. For biogenic emissions, the spatial allocation is built “from the ground up” since ARB’s biogenic model, BEIGIS, estimates emissions using a Geographic Information System (GIS) at a one square kilometer resolution. Section 6.8 describes how biogenic emissions are estimated.

### 2.9.1 Grid Definition

The CCOS emissions inventory domain was defined based on the MM5 model used to generate the meteorological parameter fields used for air quality modeling. However, the MM5 model uses only an approximation to the shape of the Earth. Therefore, there was a small offset error between the MM5-defined domain and the emissions domain defined using GIS software, which uses a more exact Earth shape.

The emissions inventory domain was defined using a Lambert Conical Projection with two parallels. The Parallels were at 30 and 60 N latitude, with a central meridian at 120.5 W longitude. The coordinate system origin was offset to 37 N latitude. The emissions inventory was gridded with a resolution of 4 km. However, because of differences between the MM5-defined domain and the GIS defined domain, the lower, left-hand corner of the emissions inventory domain was not an integer multiple of 4-km (cell size) from the domain origin. The specifications of the emissions inventory domain grid were:

<u>DEFINITION OF GRID</u>
190 x 190 cells ( 4 km x 4 km )
Lambert Origin @ ( -385131.6m , -302910.3m )
Geographic Origin @ -124.7423 deg. Latitude and 34.1210 deg. Longitude

<u>MAP PROJECTION</u>
LAMBERT
Units: Meters
Datum: NONE (Clarke 1866 spheroid)

<u>PARAMETERS</u>
1st Standard Parallel: 30 0 0.000
2nd Standard Parallel: 60 0 0.000
Central Meridian: -120 30 0.00
Latitude of Projection Origin: 37 0 0.000
X-Shift (meters): 0.0000
Y-Shift (meters): 0.0000

Emissions from this grid definition were downsized to the smaller SJV sub-domain used in modeling. Details on the sub-domain are found in the air quality modeling documentation.

### 2.9.2 Spatial Surrogates

Spatial allocation factors are used to geographically distribute countywide area source emissions to individual grid cells. These spatial allocation factors were developed from spatial surrogate data. Spatial surrogates are economic, demographic, and land cover patterns that vary geographically.

In this context, “area source emissions” refers to all source categories that are not point sources, biogenics, or on-road motor vehicles (see Table 2.2 for description). As has previously been discussed, point source emissions are allocated to grid cells using the location of the emission source. On-road motor vehicle emissions are allocated by DTIM4 (see Section 6.7). Biogenic emissions are allocated by BEIGIS (see Section 6.8).

In support of CRPAQS and CCOS, Sonoma Technology, Inc. (Funk et al. 2001) was contracted to develop spatial allocation factors. Using a GIS-based approach, STI developed gridded spatial allocation factors for a 2000 base-year and three future years (2005, 2010, and 2020) for the entire state of California based on the statewide 4-kilometer (km) grid cell domain defined by the ARB. The definition and extent of the 4-km grid were used to create a 2-km nested grid for which spatial allocation factors were developed.

Each area source category is assigned a spatial surrogate. This assignment provides a cross-reference between the spatial allocation factors and the emission inventory categories. A total of 65 unique surrogates were developed as part of this project. A summary of the spatial surrogates, for which spatial allocation factors were developed, is listed in Table 2.4.

A listing of all surrogates and spatial allocation factors, and their corresponding spatial surrogate codes (SSC), are contained in Appendix H. Appendix H also includes the surrogate-to-emission inventory cross-reference list. Designating the surrogate-to-emission inventory assignments was an iterative process among STI staff, ARB staff, and local air district staff. Note that the spatial allocation factors and emissions category assignments vary by county depending on the data available for each county.

Three basic types of surrogate data were used to develop the spatial allocation factors:

- land use and land cover
- facility location
- demographic and socioeconomic data

Land use and land cover data are associated with specific land uses, such as agricultural tilling, feedlots, or recreational boats. Facility locations are used for sources such as gas stations and dry cleaners. Demographic and socioeconomic data, such as population and housing, are associated with residential, industrial, and commercial activity (e.g. residential fuel combustion). Table 2.5 shows the sources of land use and land cover data as well as facility location information used to develop spatial allocation factors. Table 2.6 shows the sources of demographic and socioeconomic data used to develop spatial allocation factors. Table 2.7 provides a list of the counties covered by each data set. To develop spatial allocation factors of high quality and resolution, local socioeconomic and demographic data were used when available; for rural regions for which local data were not available, the Caltrans Statewide Transportation Model data were used.

**Table 2.4. Summary of spatial surrogates developed as part of the CCOS gridded surrogate project**

| Surrogate Description |
|---|
| Agricultural cropland |
| Agricultural land |
| Feedlots |
| Feedlots, dairies, and poultry farms |
| Non-pasture agricultural land |
| All airports |
| Commercial airport locations |
| Total employment & road density |
| Total housing and locations of auto body/refinishing shops |
| Locations of hospitals, institutions, population, and commercial employment |
| Total housing, service, commercial, golf courses |
| Industrial employment and locations of auto body/refinishing shops |
| Road density & housing/employment (ft2/person) |
| Population, institutions, and commercial employment |
| Total housing and locations of restaurants/bakeries |
| Single dwelling units and non-urban land |
| Housing/employment (ft2/person) |
| Computed surrogate - residential |
| Computed surrogate - non-residential |
| Computed surrogate - residential & non-residential |
| Industrial employment + computed surrogate (residential & non-residential) |
| Population |
| Residential, service, commercial, golf courses |
| Industrial employment and population |
| Total housing and commercial employment |
| Total employment |
| Total housing |
| Total housing and total employment |
| Single dwelling units |
| Single and multiple dwelling units |
| Non-retail employment |
| Industrial employment |
| Service and commercial employment |
| Elevation > 5000 ft |
| Forest land |
| Locations of bulk plants |

**Table 2.5. Sources of land use/land cover and facility locations**

| Data Source | Parameter | Resolution | Vintage | Coverage |
|---|---|---|---|---|
| United States Electronic Yellow Pages (ProCD Select Phone) | Autobody shops, dry cleaners, restaurants, gas stations, and wineries | Address locations | 1997 | Statewide |
| Environmental Systems Research Institute | Airports, parks, golf courses, hospitals, institutions | Coordinate locations and polygon coverages | 1997 | Statewide |
| U.S. Census Bureau (ESRI ADOL version) | Water bodies | Polygon coverages | 2000 | Statewide |
| United States Geological Survey | Land use and land cover for 38 counties | Gridded data | 1993 | Statewide |
| ARB CEIDARS Database | Bulk plant locations | Coordinate locations | 1999 | Statewide |
| National Atlas | Mine locations | Coordinate locations | 1998 | Statewide |
| Bureau of Transportation Statistics | Ports and shipping lanes | Coordinate locations and line coverages | Publication date is 2000; source date varies | Statewide |
| State Water Resources Control Board | Publicly owned water treatment works locations | Coordinate locations | 2001 | Statewide |
| Integrated Waste Management Board | Landfill locations | Coordinate locations | Downloaded from the Internet, no dates | Statewide |
| StreetWorks | Military bases | Polygon coverages | 1995 | Statewide |
| Digital Chart of the World | Elevation data | Polygon coverages | 1993 | Statewide |
| California Department of Oil and Gas | Oil and gas well and field locations | Coordinate locations and polygon coverages | 1998 | Statewide |
| California Teale Data Center (from ARB) | Urban and rural roads and railroads | Line and polygon coverages | RR, updated 1991; RDS, updated 1993 | Statewide |
| Department of Water Resources (from ARB) | Agricultural land cover | Polygon coverages | 1995 | San Joaquin Valley |

**Table 2.6. Sources of statewide and local TPA demographic and socioeconomic surrogate data**

| Data Source | Parameter (Years) | Resolution and Coverage |
|---|---|---|
| Caltrans Statewide Transportation Model (Caltrans STM) | Population, housing, employment (base and future) | TAZ[a] – data for rural counties only |
| Association of Bay Area Governments (ABAG) and 1990 U.S. Census | Population, housing, employment (base and future) | Census Tract – San Francisco Bay Area |
| Sacramento Area Council of Governments (SACOG) | Population, housing, employment (base and future) | TAZ[a] – Sacramento Urban Region |
| Tahoe Regional Planning Agency (TRPA) | Population, housing, employment (base and future)[b] | TAZ[a] – Lake Tahoe Region |
| Association of Monterey Bay Area Governments (AMBAG) and 1990 U.S. Census | Population (base and future) | Census Tract – Monterey Bay Area |
| South Coast Association of Governments (SCAG) | Population, housing, employment (base and future) | TAZ[a] – South Coast Region |
| Amador County Transportation Commission (ACTC) | Population, housing, employment (base and future)[b] | Growth Allocation Districts (unincorporated areas) and incorporated areas – Amador County |
| Council of Fresno County Governments (FresnoCOG) | Population, housing, employment (base and future) | TAZ[a] – Fresno County |
| San Diego Association of Governments (SANDAG) | Population, housing, employment (base and future) | TAZ[a] – San Diego County |
| San Joaquin Council of Governments (SJCOG) | Population, housing, employment (base and future) | TAZ[a] – San Joaquin County |
| Tulare County Association of Governments (TCAG) | Population, housing, employment (base and future) | Incorporated and unincorporated areas – Tulare County |
| Stanislaus Council of Governments (StanCOG) | Population, housing, employment (base and future) | Incorporated and unincorporated areas – Stanislaus County |
| Kern Council of Governments (KernCOG) | Population, housing, employment (base and future) | TAZ[a] – Kern County |

**Table 2.7. Counties covered by each of the demographic and socioeconomic data sets listed in Table 2.6**

| Data Source | County Coverage |
|---|---|
| Caltrans STM | Alpine, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Imperial, Inyo, Kings, Lake, Lassen, Mariposa, Madera, Merced, Mendocino, Modoc, Mono, Nevada, Plumas, east Riverside, east San Bernardino, San Luis Obispo, Santa Barbara, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne |
| ABAG | Alameda, Contra Costa Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma |
| SACOG/TRPA | El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba |
| AMBAG | Monterey, San Benito, Santa Cruz |
| SCAG | Los Angeles, Orange, west Riverside, west San Bernardino, Ventura |
| ACTC | Amador |
| FresnoCOG | Fresno |
| SANDAG | San Diego |
| SJCOG | San Joaquin |
| TCAG | Tulare |
| StanCOG | Stanislaus |
| KernCOG | Kern |

## 2.10 *Speciation*

The ARB's emission inventory and photochemical air quality models both quantify organic compounds as Total Organic Gases (TOG). Photochemical models simulate the physical and chemical processes in the lower atmosphere, and include all emissions of the important compounds involved in photochemistry. Organic gases are one of the most important classes of chemicals involved in photochemistry. Organic gases emitted to the atmosphere are referred to as total organic gases (TOG). ARB's chemical speciation profiles (CARB 2006) are applied to characterize the chemical composition of the TOG emitted from each source type.

TOG includes compounds of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. TOG includes all organic gas compounds emitted to the atmosphere, including the low reactivity, or exempt, VOC compounds (e.g., methane, ethane, various chlorinated fluorocarbons, acetone, perchloroethylene, volatile methyl siloxanes, etc.). TOG also includes low volatility or low vapor pressure (LVP) organic compounds (e.g., some petroleum distillate mixtures). TOG includes all organic compounds that can become airborne (through evaporation, sublimation, as aerosols, etc.), excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

Total Organic Gas (TOG) emissions are reported in the ARB's emission inventory and are the basis for deriving the Reactive Organic Gas (ROG) emission components, which are also reported in the inventory. ROG is defined as TOG minus ARB's "exempt" compounds (e.g., methane, ethane, CFCs, etc.). ROG is nearly identical to U.S. EPA's term "VOC", which is based on EPA's exempt list. For all practical purposes, use of the terms ROG and VOC are interchangeable. Also, various regulatory uses of the term "VOC", such as that for consumer products exclude specific, additional compounds from particular control requirements.

### 2.10.1 Speciation Profiles

Speciation profiles are used to estimate the amounts of various organic compounds that make up TOG. A speciation profile contains a list of organic compounds and the weight fraction that each compound composes of the TOG emissions from a particular source type. Each process or product category is keyed to one of several hundred currently available speciation profiles. The speciation profiles are applied to TOG to develop both the photochemical model inputs and the emission inventory for ROG.

It should be noted that districts are allowed to report their own fraction of the TOG that is reactive to calculate ROG rather than use the information from the assigned organic profiles. These district-reported fractions are not used in developing modeling inventories because the information needed to calculate the amount of each organic compound is not available.

To the extent possible given available data, ARB's organic gas speciation profiles contain all emitted organic species that can be identified (ideally, detected to very low levels). This includes reactive compounds, unreactive and exempt compounds, and to the extent the data are available, low vapor pressure compounds. Research studies are conducted regularly to improve ARB's species profiles. These profiles support ozone modeling studies but are also designed to be used for aerosol and regional toxics modeling. The profiles are also used to support other health or welfare related modeling studies where the compounds of interest cannot always be anticipated. Therefore, organic gas emission profiles should be as complete and accurate as possible.

The speciation profiles used in the emission inventory are available for download from the ARB's web site at http://www.arb.ca.gov/ei/speciate/speciate.htm. The Organic Speciation Profiles (ORGPROF) file contains the weight fraction data (expressed as percent for ease of display) of each chemical in each profile. Each chemical fraction is multiplied by the Total Organic Gas (TOG) emissions for a source category to get the amount of each specific constituent chemical. In addition to the chemical name for each chemical constituent, the file also shows the chemical code (a 5-digit internal identifier) and the Chemical Abstracts Service (CAS) number, which is a unique identifying code (up to 9 digits) assigned to chemicals by the CAS Registry Service.

Also available for download from ARB’s web site is a cross-reference file that indicates which Organic Gas profile is assigned to each source category in the inventory. The inventory source categories are represented by an 8-digit Source Classification Code (SCC) for point sources, or a 14-digit Emission Inventory Code (EIC) for area and mobile sources. This file also contains the fraction of reactive organic gas (FROG) values for organic profiles. Some of the Organic Gas Speciation Profiles related to motor vehicles and fuel evaporative sources vary by the inventory year of interest, due to changes in fuel composition and vehicle fleet composition over time.

ARB has an ongoing effort to update speciation profiles as data become available, such as through testing of emission sources or surveys of product formulation. New speciation data generally undergo technical and peer review, and updating of the profiles is coordinated with users of the data. Several recent changes to ARB's speciation profiles were for: 1) consumer products, 2) aerosol coatings, 3) architectural coatings, 4) pesticides and 5) hot soak from gasoline-powered vehicles.

### 2.10.2 Chemical Mechanisms

Airshed models are essential for the development of effective control strategies for reducing photochemical air pollution because they provide the only available scientific basis for making quantitative estimates of changes in air quality resulting from changes in emissions. The chemical mechanism is the portion of the model that represents the processes by which emitted primary pollutants, such as TOG, carbon monoxide (CO), and oxides of nitrogen ($NO_x$), react in the gas phase to form secondary pollutants such as ozone ($O_3$) and other oxidants.

For State Implementation Plan (SIP) attainment demonstrations and evaluations, the U.S. EPA has approved the California Air Resources Board’s photochemical air quality models. The air quality models used by the ARB for SIP attainment demonstrations use the SAPRC photochemical mechanism. This mechanism is based on extensive scientific research and is documented in the scientific literature (Carter 2000). Table 2.8 shows modeled ROG species (or species categories) for the SAPRC-99 chemical mechanism. Table 2.9 shows modeled species for NOx.

## Table 2.8. ARB's SAPRC-99 Emitted Organic Model Species

| Model Species Name | Description |
|---|---|
| HCHO | Formaldehyde |
| CCHO | Acetaldehyde |
| RCHO | Lumped C3+ Aldehydes |
| ACET | Acetone |
| MEK | Ketones and other non-aldehyde oxygenated products |
| PROD | |
| RNO3 | Lumped Organic Nitrates |
| PAN | Peroxy Acetyl Nitrate |
| PAN2 | PPN and other higher alkyl PAN analogues |
| BALD | Aromatic aldehydes (e.g., benzaldehyde) |
| PBZN | PAN analogues formed from Aromatic Aldehydes |
| PHEN | Phenol |
| CRES | Cresols |
| NPHE | Nitrophenols |
| GLY | Glyoxal |
| MGLY | Methyl Glyoxal |
| MVK | Methyl Vinyl Ketone |
| MEOH | Methanol |
| HC2H | Formic Acid |
| CH4 | Methane |
| ETHE | Ethene |
| ISOP | Isoprene |
| TERP | Terpenes |
| MTBE | Methyl Tertiary Butyl Ether |
| ETOH | Ethanol |
| NROG | Non-reactive |
| LOST | Lost carbon |
| ALK1 | Alkanes and other non-aromatic compounds that react only with OH, and have kOH < $5 \times 10^2$ ppm-1 min-1. (Primarily ethane) |
| ALK2 | Alkanes and other non-aromatic compounds that react only with OH, and have kOH between $5 \times 10^2$ and $2.5 \times 10^3$ ppm-1 min-1. (Primarily propane and acetylene) |
| ALK3 | Alkanes and other non-aromatic compounds that react only with OH, and have kOH between $2.5 \times 10^3$ and $5 \times 10^3$ ppm-1 min-1. |
| ALK4 | Alkanes and other non-aromatic compounds that react only with OH, and have kOH between $5 \times 10^3$ and $1 \times 10^4$ ppm-1 min-1. |
| ALK5 | Alkanes and other non-aromatic compounds that react only with OH, and have kOH greater than $1 \times 10^4$ ppm-1 min-1. |
| ARO1 | Aromatics with kOH < $2x10^4$ ppm-1 min-1. |
| ARO2 | Aromatics with kOH > $2x10^4$ ppm-1 min-1. |
| OLE1 | Alkenes (other than ethene) with kOH < $7x10^4$ ppm-1 min-1. |
| OLE2 | Alkenes with kOH > $7x10^4$ ppm-1 min-1. |

**Table 2.9. Model Species for NOx**

| Model Species Name | Description |
|---|---|
| HONO | Nitrous Acid |
| NO | Nitric Oxide |
| NO2 | Nitrogen Dioxide |

Both U.S. EPA's and ARB's models require estimates of total organic gases, which include the "exempt VOCs", and, to the extent data are available, any low vapor pressure compounds that become airborne. Model results for ozone non-attainment areas have demonstrated that even compounds with low photochemical reactivity or low vapor pressure can contribute to photochemical ozone formation. For example, even an "exempt VOC" like ethane has been shown to have a contribution to ozone formation. If all exempt compounds and low vapor pressure compounds were omitted from photochemical model simulations, the ozone attainment demonstration would be compromised. The model takes into account that, individually, compounds with low reactivity or that are present in small amounts have a small impact on ozone formation. However, the cumulative effect of several low reactive compounds or many low emission compounds can be a significant contributor to photochemical ozone formation.

The implementation of the chemical mechanism is unique in each air quality model. In the case of the CAMx model, the chemical species ETOH (ethanol), MTBE (methyl tert-butyl ether) and MBUT (methyl butenol) are not treated explicitly. These species are considered important to ozone chemistry in California because ETOH and MTBE are motor-vehicle fuel components and MBUT is emitted by vegetation. Therefore, to include emissions of these species in the emissions inventory for CAMx, they were mapped as follows:

(moles of ETOH)*1.3 = moles converted to ALK3
(moles of MTBE)*1.2 = moles converted to ALK3
(moles of MBUT)*1.8 = moles converted to OLE1

## 2.11 *External Baseline Adjustments*

In developing the emission inventories used for modeling, ARB staff first prepared "baseline" modeling inventories – using data from the California Emissions Forecasting System (CEFS) as described in the prior sections. However, to account for additional rules that were not yet characterized and to improve characterization of some specific sources, specific adjustments were made to the baseline inventory. These are termed "external, baseline adjustments". These adjustments were applied via two sets of factors.

<u>Adjustment 1</u>. The first set of adjustment factors, referred to as Adjustment 1, account for regulations adopted through 2006 and minor technical improvements not yet included in the CEFS inventories. The adjustments affect on-road motor vehicles, off-road sources, ships, consumer products, pesticides and sources within the SJV district. The basis for these factors is described in Appendix A of the April 26, 2007 Revised Draft of the Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan (CARB, 2007).

<u>Adjustment 2</u>. The second set of adjustment factors, referred to as Adjustment 2, reflect improvements to the inventory for San Joaquin Valley.

Appendix I contains documentation for each of the adjustments made under Adjustment 2. These adjustments affect the following emission categories:

- managed burning,
- residential fuel combustion,
- dairy and feedlot cattle dust,
- paved road dust,
- manufacturing and industrial,
- service and commercial,
- cooking,
- food and agriculture, and
- glass manufacturing.

# 3 SUMMARY OF EMISSION INPUTS

This section provides summaries of annual 2000, 2005, and 2014 emissions used as inputs to the SJV PM2.5 SIP air quality modeling. Data are displayed in a variety of ways. Section 3.1 provides tabular summaries, Section 3.2 displays spatial plots and Sections 3.3 and 3.4 show time series plots for the entire domain.

As indicated in the prior section, external baseline adjustments were applied to baseline emission estimates. Certain summaries provided in the following sections characterize the magnitude of these adjustments in the columns denoted “Adjustment 1” and “Adjustment 2”.

## 3.1 *Tabular Summaries – Domain Totals*

This section contains a series of tabular summaries as follows:

- Tables 3.01 through 3.09 show domain total emissions for Wednesday January 11 for 2000, 2005 and 2014. Emissions are displayed for baseline (unadjusted), Adjustment 1 and Adjustment 2, respectively.
- Tables 3.10 through 3.18 show domain total emissions for Wednesday January 11 by major source category and pollutant. Emissions are displayed for 2000, 2005 and 2014 for baseline (unadjusted), Adjustment 1 and Adjustment 2, respectively.
- Tables 3.19 through 3.27 show domain total emissions for Wednesday January 11 by summary category and pollutant. Emissions are displayed for 2000, 2005 and 2014 for baseline (unadjusted), Adjustment 1 and Adjustment 2, respectively.
- Tables 3.28 through 3.36 show domain total emissions for Wednesday January 11 by county and pollutant. Emissions are displayed for 2000, 2005 and 2014 for baseline (unadjusted), Adjustment 1 and Adjustment 2, respectively. The biogenic emissions appear under “Missing County” in the tables below because the files that were used to generate the emission sums do not include a county identifier.

## Year 2000

**Table 3.01. Domain Totals for January 11, 2000 by Major Category: Baseline**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 17,939.63 | 4,308.18 | 285.01 | 7,334.56 | 4,109.78 | 762.98 | 3,620.07 | 2,472.03 | 810.70 |

**Table 3.02. Domain Totals for January 11, 2000 by Major Category: Adjustment 1**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 17,939.63 | 4,311.78 | 285.01 | 8,071.63 | 4,097.51 | 762.98 | 3,682.80 | 2,466.33 | 809.72 |

**Table 3.03. Domain Totals for January 11, 2000 by Major Category: Adjustment 2**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 17,939.63 | 4,294.05 | 285.01 | 7,882.73 | 4,097.03 | 725.04 | 3,667.69 | 2,466.51 | 810.38 |

## Year 2005

**Table 3.04. Domain Totals for January 11, 2005 by Major Category: Baseline**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 13,650.07 | 4,034.16 | 318.40 | 6,728.29 | 2,761.07 | 783.08 | 2,963.43 | 1,679.44 | 719.73 |

**Table 3.05. Domain Totals for January 11, 2005 by Major Category: Adjustment 1**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 13,588.67 | 3,772.79 | 316.57 | 7,521.55 | 2,733.16 | 783.08 | 3,013.64 | 1,660.73 | 708.74 |

**Table 3.06 Domain Totals for January 11, 2005 by Major Category: Adjustment 2**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 13,501.60 | 3,750.28 | 316.42 | 7,295.11 | 2,721.33 | 738.69 | 2,988.41 | 1,649.91 | 699.09 |

## Year 2014

**Table 3.07. Domain Totals for January 11, 2014 by Major Category: Baseline**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 9,561.01 | 2,790.38 | 391.91 | 6,534.95 | 2,717.15 | 831.67 | 2,512.10 | 1,631.74 | 714.42 |

**Table 3.08 Domain Totals for January 11, 2014 by Major Category: Adjustment 1**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 9,553.46 | 2,677.78 | 378.41 | 7,255.87 | 2,704.18 | 831.67 | 2,555.66 | 1,623.29 | 709.56 |

**Table 3.09 Domain Totals for January 11, 2014 by Major Category: Adjustment 2**

| CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|
| 9,455.95 | 2,641.04 | 378.17 | 7,007.11 | 2,682.64 | 776.61 | 2,524.01 | 1,603.20 | 691.22 |

### Table 3.10. Totals for Wednesday January 11, 2000 by Major Category: Baseline

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 384.18 | 406.63 | 48.20 | 148.62 | 45.55 | 5.49 | 34.17 | 40.08 | 37.24 |
| 1 | WASTE DISPOSAL | 2.18 | 3.02 | 0.67 | 1,245.77 | 1.62 | 42.56 | 14.86 | 0.83 | 0.73 |
| 2 | CLEANING AND SURFACE COATINGS | 0.15 | 0.40 | 0.04 | 381.17 | 0.39 | 2.13 | 279.20 | 0.38 | 0.36 |
| 3 | PETROLEUM PROD AND MARKETING | 10.08 | 13.97 | 58.60 | 536.56 | 4.90 | 1.85 | 219.60 | 3.05 | 2.26 |
| 4 | INDUSTRIAL PROCESSES | 53.52 | 96.16 | 31.57 | 95.55 | 174.20 | 9.22 | 79.44 | 100.22 | 51.50 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 475.95 | 0.03 | 37.45 | 419.42 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,545.81 | 156.27 | 9.64 | 1,811.66 | 3,726.68 | 538.27 | 300.23 | 2,173.18 | 586.03 |
| 7 | ON-ROAD MOTOR VEHICLES | 12,726.85 | 2,315.33 | 11.27 | 1,343.71 | 74.73 | 75.25 | 1,233.16 | 74.09 | 57.91 |
| 8 | OTHER MOBILE SOURCES | 2,216.86 | 1,316.41 | 125.03 | 484.40 | 81.69 | 0.00 | 431.80 | 80.18 | 74.65 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

### Table 3.11. Totals for Wednesday January 11, 2000 by Major Category: Adjustment 1

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 384.18 | 408.29 | 48.20 | 148.96 | 45.54 | 5.49 | 34.22 | 40.08 | 37.24 |
| 1 | WASTE DISPOSAL | 2.18 | 3.02 | 0.67 | 1,247.61 | 1.62 | 42.56 | 14.88 | 0.83 | 0.73 |
| 2 | CLEANING AND SURFACE COATINGS | 0.15 | 0.40 | 0.04 | 382.17 | 0.39 | 2.13 | 280.03 | 0.38 | 0.36 |
| 3 | PETROLEUM PROD AND MARKETING | 10.08 | 13.98 | 58.60 | 540.09 | 4.90 | 1.85 | 220.19 | 3.05 | 2.26 |
| 4 | INDUSTRIAL PROCESSES | 53.52 | 96.24 | 31.57 | 95.75 | 174.20 | 9.22 | 79.60 | 100.22 | 51.50 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 478.27 | 0.03 | 37.45 | 421.48 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,545.81 | 158.11 | 9.64 | 2,539.49 | 3,714.58 | 538.27 | 359.24 | 2,167.65 | 585.19 |
| 7 | ON-ROAD MOTOR VEHICLES | 12,726.85 | 2,315.33 | 11.27 | 1,343.71 | 74.73 | 75.25 | 1,233.16 | 74.09 | 57.91 |
| 8 | OTHER MOBILE SOURCES | 2,216.86 | 1,316.41 | 125.03 | 484.40 | 81.52 | 0.00 | 431.80 | 80.01 | 74.50 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

### Table 3.12. Totals for Wednesday January 11, 2000 by Major Category: Adjustment 2

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 384.18 | 390.57 | 48.20 | 148.96 | 45.47 | 5.49 | 34.22 | 40.01 | 37.17 |
| 1 | WASTE DISPOSAL | 2.18 | 3.02 | 0.67 | 1,247.61 | 1.62 | 42.56 | 14.88 | 0.83 | 0.73 |
| 2 | CLEANING AND SURFACE COATINGS | 0.15 | 0.40 | 0.04 | 382.17 | 0.39 | 2.13 | 280.03 | 0.38 | 0.36 |
| 3 | PETROLEUM PROD AND MARKETING | 10.08 | 13.98 | 58.60 | 540.09 | 4.90 | 1.85 | 220.19 | 3.05 | 2.26 |
| 4 | INDUSTRIAL PROCESSES | 53.52 | 96.24 | 31.57 | 95.75 | 174.20 | 9.22 | 79.60 | 100.22 | 51.50 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 478.27 | 0.03 | 37.45 | 421.48 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,545.81 | 158.11 | 9.64 | 2,350.59 | 3,714.17 | 500.33 | 344.13 | 2,167.90 | 585.92 |
| 7 | ON-ROAD MOTOR VEHICLES | 12,726.85 | 2,315.33 | 11.27 | 1,343.71 | 74.73 | 75.25 | 1,233.16 | 74.09 | 57.91 |
| 8 | OTHER MOBILE SOURCES | 2,216.86 | 1,316.41 | 125.03 | 484.40 | 81.52 | 0.00 | 431.80 | 80.01 | 74.50 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

### Table 3.13. Totals for Wednesday January 11, 2005 by Major Category: Baseline

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 355.27 | 294.44 | 37.27 | 134.44 | 50.65 | 5.21 | 31.18 | 45.74 | 43.19 |
| 1 | WASTE DISPOSAL | 2.41 | 3.38 | 0.72 | 1,333.16 | 1.88 | 47.21 | 16.16 | 0.93 | 0.76 |
| 2 | CLEANING AND SURFACE COATINGS | 0.39 | 0.28 | 0.02 | 250.77 | 1.13 | 2.13 | 172.35 | 1.09 | 1.05 |
| 3 | PETROLEUM PROD AND MARKETING | 11.86 | 10.73 | 65.31 | 467.06 | 4.06 | 1.85 | 142.25 | 2.56 | 1.92 |
| 4 | INDUSTRIAL PROCESSES | 50.61 | 90.16 | 29.67 | 73.37 | 194.65 | 9.24 | 61.75 | 107.81 | 49.87 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 433.31 | 0.03 | 35.32 | 379.80 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,565.89 | 150.99 | 9.13 | 1,850.61 | 2,336.71 | 566.02 | 302.87 | 1,351.86 | 478.71 |
| 7 | ON-ROAD MOTOR VEHICLES | 8,614.13 | 2,239.64 | 13.95 | 932.32 | 88.99 | 65.34 | 853.18 | 88.22 | 68.52 |
| 8 | OTHER MOBILE SOURCES | 2,049.51 | 1,244.55 | 162.32 | 442.07 | 82.95 | 0.00 | 395.69 | 81.19 | 75.68 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

### Table 3.14. Totals for Wednesday January 11, 2005 by Major Category: Adjustment 1

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 355.27 | 296.27 | 37.27 | 135.29 | 50.65 | 5.21 | 31.29 | 45.74 | 43.19 |
| 1 | WASTE DISPOSAL | 2.41 | 3.38 | 0.72 | 1,335.36 | 1.88 | 47.21 | 16.18 | 0.93 | 0.76 |
| 2 | CLEANING AND SURFACE COATINGS | 0.39 | 0.28 | 0.02 | 251.75 | 1.13 | 2.13 | 173.15 | 1.09 | 1.05 |
| 3 | PETROLEUM PROD AND MARKETING | 11.86 | 10.75 | 65.31 | 471.46 | 4.06 | 1.85 | 142.90 | 2.56 | 1.92 |
| 4 | INDUSTRIAL PROCESSES | 50.61 | 90.22 | 29.67 | 73.58 | 194.65 | 9.24 | 61.92 | 107.81 | 49.87 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 430.00 | 0.03 | 35.32 | 377.22 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,565.89 | 153.02 | 9.13 | 2,655.52 | 2,319.58 | 566.02 | 368.12 | 1,343.91 | 477.53 |
| 7 | ON-ROAD MOTOR VEHICLES | 8,552.31 | 1,974.91 | 12.13 | 915.38 | 78.48 | 65.34 | 839.00 | 77.71 | 58.93 |
| 8 | OTHER MOBILE SOURCES | 2,049.93 | 1,243.95 | 162.32 | 442.04 | 82.70 | 0.00 | 395.67 | 80.94 | 75.45 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

### Table 3.15. Totals for Wednesday January 11, 2005 by Major Category: Adjustment 2

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 355.27 | 281.19 | 37.27 | 135.29 | 50.56 | 5.21 | 31.29 | 45.65 | 43.10 |
| 1 | WASTE DISPOSAL | 2.41 | 3.38 | 0.72 | 1,335.36 | 1.88 | 47.21 | 16.18 | 0.93 | 0.76 |
| 2 | CLEANING AND SURFACE COATINGS | 0.39 | 0.28 | 0.02 | 251.75 | 1.13 | 2.13 | 173.15 | 1.09 | 1.05 |
| 3 | PETROLEUM PROD AND MARKETING | 11.86 | 10.75 | 65.31 | 471.46 | 4.06 | 1.85 | 142.90 | 2.56 | 1.92 |
| 4 | INDUSTRIAL PROCESSES | 50.61 | 90.22 | 29.67 | 73.58 | 194.65 | 9.24 | 61.92 | 107.81 | 49.87 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 430.00 | 0.03 | 35.32 | 377.22 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,478.81 | 145.60 | 8.98 | 2,429.09 | 2,307.83 | 521.62 | 342.89 | 1,333.17 | 467.97 |
| 7 | ON-ROAD MOTOR VEHICLES | 8,552.31 | 1,974.91 | 12.13 | 915.38 | 78.48 | 65.34 | 839.00 | 77.71 | 58.93 |
| 8 | OTHER MOBILE SOURCES | 2,049.93 | 1,243.95 | 162.32 | 442.04 | 82.70 | 0.00 | 395.67 | 80.94 | 75.45 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

**Table 3.16. Totals for Wednesday January 11, 2014 by Major Category: Baseline**

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 382.51 | 290.88 | 40.52 | 142.14 | 70.47 | 5.72 | 31.96 | 64.90 | 62.09 |
| 1 | WASTE DISPOSAL | 2.73 | 3.67 | 0.79 | 1,483.15 | 2.17 | 53.46 | 17.26 | 1.07 | 0.87 |
| 2 | CLEANING AND SURFACE COATINGS | 0.47 | 0.32 | 0.03 | 279.13 | 1.41 | 2.15 | 187.79 | 1.36 | 1.31 |
| 3 | PETROLEUM PROD AND MARKETING | 8.98 | 10.25 | 67.50 | 502.00 | 4.02 | 1.85 | 144.74 | 2.50 | 1.80 |
| 4 | INDUSTRIAL PROCESSES | 58.74 | 100.47 | 34.09 | 84.26 | 210.13 | 9.31 | 70.67 | 117.65 | 56.34 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 443.40 | 0.04 | 33.13 | 388.35 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,612.92 | 148.49 | 8.76 | 1,954.87 | 2,281.21 | 630.62 | 309.01 | 1,299.80 | 471.22 |
| 7 | ON-ROAD MOTOR VEHICLES | 4,338.42 | 1,156.05 | 5.07 | 485.63 | 68.67 | 44.66 | 439.40 | 67.77 | 48.82 |
| 8 | OTHER MOBILE SOURCES | 2,156.25 | 1,080.26 | 235.14 | 349.21 | 79.02 | 0.00 | 314.73 | 76.67 | 71.94 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

**Table 3.17. Totals for Wednesday January 11, 2014 by Major Category: Adjustment 1**

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 382.51 | 292.90 | 40.52 | 143.03 | 70.47 | 5.72 | 32.07 | 64.90 | 62.09 |
| 1 | WASTE DISPOSAL | 2.73 | 3.68 | 0.79 | 1,485.28 | 2.17 | 53.46 | 17.28 | 1.07 | 0.87 |
| 2 | CLEANING AND SURFACE COATINGS | 0.47 | 0.33 | 0.03 | 280.16 | 1.41 | 2.15 | 188.61 | 1.36 | 1.31 |
| 3 | PETROLEUM PROD AND MARKETING | 8.98 | 10.27 | 67.50 | 507.27 | 4.02 | 1.85 | 145.41 | 2.50 | 1.80 |
| 4 | INDUSTRIAL PROCESSES | 58.74 | 100.54 | 34.09 | 84.49 | 210.13 | 9.31 | 70.85 | 117.65 | 56.34 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 429.94 | 0.04 | 33.13 | 377.10 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,612.92 | 150.57 | 8.76 | 2,687.42 | 2,273.09 | 630.62 | 368.45 | 1,296.08 | 470.65 |
| 7 | ON-ROAD MOTOR VEHICLES | 4,338.42 | 1,054.04 | 5.07 | 483.52 | 67.57 | 44.66 | 437.49 | 66.68 | 48.02 |
| 8 | OTHER MOBILE SOURCES | 2,148.70 | 1,065.45 | 221.64 | 343.61 | 75.28 | 0.00 | 310.22 | 73.03 | 68.44 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

**Table 3.18. Totals for Wednesday January 11, 2014 by Major Category: Adjustment 2**

| EIC1 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | FUEL COMBUSTION | 382.51 | 268.12 | 40.52 | 143.03 | 70.37 | 5.72 | 32.07 | 64.80 | 61.99 |
| 1 | WASTE DISPOSAL | 2.73 | 3.68 | 0.79 | 1,485.28 | 2.17 | 53.46 | 17.28 | 1.07 | 0.87 |
| 2 | CLEANING AND SURFACE COATINGS | 0.47 | 0.33 | 0.03 | 280.16 | 1.41 | 2.15 | 188.61 | 1.36 | 1.31 |
| 3 | PETROLEUM PROD AND MARKETING | 8.98 | 10.27 | 67.50 | 507.27 | 4.02 | 1.85 | 145.41 | 2.50 | 1.80 |
| 4 | INDUSTRIAL PROCESSES | 58.74 | 100.54 | 34.09 | 84.49 | 210.13 | 9.31 | 70.85 | 117.65 | 56.34 |
| 5 | SOLVENT EVAPORATION | 0.00 | 0.00 | 0.00 | 429.94 | 0.04 | 33.13 | 377.10 | 0.03 | 0.03 |
| 6 | MISCELLANEOUS PROCESSES | 2,515.41 | 138.61 | 8.52 | 2,438.65 | 2,251.65 | 575.57 | 336.80 | 1,276.09 | 452.42 |
| 7 | ON-ROAD MOTOR VEHICLES | 4,338.42 | 1,054.04 | 5.07 | 483.52 | 67.57 | 44.66 | 437.49 | 66.68 | 48.02 |
| 8 | OTHER MOBILE SOURCES | 2,148.70 | 1,065.45 | 221.64 | 343.61 | 75.28 | 0.00 | 310.22 | 73.03 | 68.44 |
| 9 | NATURAL SOURCES | 0.00 | 0.00 | 0.00 | 811.17 | 0.00 | 50.76 | 608.19 | 0.00 | 0.00 |

# Table 3.19. Totals for Wednesday January 11, 2000 by Summary Category: Baseline

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 56.74 | 51.52 | 4.76 | 30.97 | 6.82 | 2.35 | 4.97 | 6.35 | 5.89 |
| 020 | COGENERATION | 49.01 | 30.87 | 1.87 | 17.27 | 4.43 | 0.18 | 4.04 | 4.03 | 3.72 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.66 | 45.18 | 7.44 | 26.59 | 2.09 | 0.10 | 4.15 | 2.08 | 2.08 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 10.22 | 46.03 | 12.75 | 3.52 | 4.26 | 0.61 | 1.79 | 4.06 | 3.98 |
| 050 | MANUFACTURING AND INDUSTRIAL | 52.77 | 86.07 | 14.52 | 20.28 | 5.92 | 1.63 | 3.96 | 5.71 | 5.45 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 111.24 | 22.60 | 2.69 | 7.72 | 3.02 | 0.10 | 6.06 | 2.94 | 2.89 |
| 060 | SERVICE AND COMMERCIAL | 71.00 | 104.86 | 3.66 | 35.62 | 8.31 | 0.40 | 6.90 | 8.24 | 8.19 |
| 099 | OTHER (FUEL COMBUSTION) | 10.55 | 19.50 | 0.50 | 6.65 | 10.70 | 0.11 | 2.31 | 6.68 | 5.05 |
| 110 | SEWAGE TREATMENT | 0.25 | 0.39 | 0.28 | 1.29 | 0.03 | 0.25 | 0.70 | 0.02 | 0.02 |
| 120 | LANDFILLS | 0.85 | 0.67 | 0.21 | 1,182.55 | 0.89 | 9.78 | 7.92 | 0.40 | 0.35 |
| 130 | INCINERATORS | 1.01 | 1.77 | 0.14 | 0.94 | 0.23 | 0.09 | 0.16 | 0.11 | 0.10 |
| 140 | SOIL REMEDIATION | 0.06 | 0.09 | 0.03 | 0.49 | 0.11 | 0.00 | 0.34 | 0.04 | 0.03 |
| 199 | OTHER (WASTE DISPOSAL) | 0.01 | 0.10 | 0.00 | 60.49 | 0.36 | 32.42 | 5.74 | 0.25 | 0.25 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 8.60 | 0.00 | 0.00 | 0.84 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 178.79 | 0.00 | 0.00 | 99.87 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.11 | 0.16 | 0.04 | 122.45 | 0.32 | 0.03 | 114.08 | 0.30 | 0.29 |
| 240 | PRINTING | 0.01 | 0.05 | 0.00 | 25.31 | 0.05 | 0.04 | 25.31 | 0.05 | 0.04 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 35.84 | 0.01 | 0.00 | 31.80 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.03 | 0.19 | 0.00 | 10.17 | 0.02 | 2.06 | 7.30 | 0.02 | 0.02 |
| 310 | OIL AND GAS PRODUCTION | 1.91 | 3.32 | 0.53 | 104.11 | 0.10 | 0.00 | 53.90 | 0.08 | 0.08 |
| 320 | PETROLEUM REFINING | 6.03 | 9.85 | 58.06 | 49.04 | 3.99 | 1.85 | 38.43 | 2.54 | 2.08 |
| 330 | PETROLEUM MARKETING | 2.14 | 0.80 | 0.00 | 382.93 | 0.81 | 0.00 | 126.85 | 0.43 | 0.10 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.44 | 1.82 | 2.69 | 34.07 | 5.99 | 0.25 | 27.38 | 5.09 | 4.71 |
| 420 | FOOD AND AGRICULTURE | 2.71 | 9.60 | 2.52 | 23.33 | 29.67 | 0.07 | 21.15 | 12.05 | 2.79 |
| 430 | MINERAL PROCESSES | 35.78 | 56.50 | 17.60 | 7.01 | 94.51 | 0.07 | 5.64 | 54.45 | 24.48 |
| 440 | METAL PROCESSES | 1.85 | 1.65 | 0.20 | 2.19 | 2.32 | 0.00 | 1.59 | 1.61 | 1.21 |
| 450 | WOOD AND PAPER | 1.80 | 3.10 | 0.75 | 4.79 | 21.67 | 0.00 | 4.12 | 13.70 | 9.02 |
| 460 | GLASS AND RELATED PRODUCTS | 0.57 | 14.17 | 6.96 | 0.25 | 1.74 | 0.01 | 0.18 | 1.56 | 1.40 |
| 470 | ELECTRONICS | 0.01 | 0.03 | 0.00 | 1.18 | 0.10 | 0.00 | 0.95 | 0.05 | 0.03 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 10.37 | 9.31 | 0.85 | 22.72 | 18.20 | 8.82 | 18.42 | 11.70 | 7.86 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 305.34 | 0.00 | 0.00 | 259.30 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 111.39 | 0.00 | 0.00 | 108.74 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 39.41 | 0.00 | 37.45 | 32.38 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 19.82 | 0.03 | 0.00 | 19.01 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,741.05 | 129.11 | 8.59 | 274.46 | 270.85 | 12.36 | 120.38 | 253.79 | 244.63 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 1,419.61 | 147.04 | 467.32 | 113.57 | 72.64 | 17.07 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 415.08 | 0.00 | 0.00 | 203.10 | 20.30 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 810.83 | 0.00 | 0.00 | 370.71 | 55.62 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 235.99 | 0.00 | 0.00 | 140.25 | 14.02 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 1,718.35 | 0.00 | 0.00 | 1,016.94 | 135.06 |
| 660 | FIRES | 10.14 | 0.24 | 0.00 | 1.01 | 1.17 | 0.00 | 0.71 | 1.15 | 1.08 |
| 670 | WASTE BURNING AND DISPOSAL | 793.31 | 26.85 | 1.05 | 107.70 | 92.67 | 4.64 | 59.38 | 90.31 | 83.67 |
| 690 | COOKING | 0.16 | 0.00 | 0.00 | 8.77 | 33.40 | 0.00 | 6.13 | 23.38 | 14.03 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.15 | 0.07 | 0.00 | 0.10 | 1.31 | 53.95 | 0.07 | 0.92 | 0.55 |
| 700 | On-Road Motor Vehicles | 12,726.85 | 2,315.33 | 11.27 | 1,343.71 | 74.73 | 0.00 | 1,233.16 | 74.09 | 57.91 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 41.86 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.32 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.73 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.82 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.20 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 249.71 | 54.02 | 2.81 | 40.28 | 9.03 | 0.00 | 35.91 | 8.81 | 8.72 |
| 820 | TRAINS | 28.90 | 194.16 | 8.05 | 13.29 | 4.40 | 0.00 | 11.12 | 4.40 | 4.05 |
| 830 | SHIPS AND COMMERCIAL BOATS | 38.84 | 276.79 | 109.70 | 17.62 | 20.28 | 0.00 | 14.77 | 19.62 | 18.94 |
| 840 | RECREATIONAL BOATS | 126.38 | 3.82 | 0.01 | 36.92 | 1.39 | 0.00 | 34.86 | 1.25 | 0.95 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 135.10 | 1.08 | 0.25 | 41.00 | 0.80 | 0.00 | 38.28 | 0.72 | 0.54 |
| 860 | OFF-ROAD EQUIPMENT | 1,536.69 | 680.34 | 3.49 | 259.95 | 39.32 | 0.00 | 225.28 | 38.92 | 35.52 |
| 870 | FARM EQUIPMENT | 101.24 | 106.20 | 0.72 | 24.87 | 6.47 | 0.00 | 21.29 | 6.46 | 5.93 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 50.46 | 0.00 | 0.00 | 50.28 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.20. Totals for Wednesday January 11, 2000 by Summary Category: Adjustment 1

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 56.74 | 51.59 | 4.76 | 30.99 | 6.82 | 2.35 | 4.97 | 6.35 | 5.89 |
| 020 | COGENERATION | 49.01 | 30.89 | 1.87 | 17.28 | 4.43 | 0.18 | 4.04 | 4.03 | 3.72 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.66 | 45.19 | 7.44 | 26.59 | 2.09 | 0.10 | 4.15 | 2.08 | 2.08 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 10.22 | 46.03 | 12.75 | 3.52 | 4.26 | 0.61 | 1.79 | 4.06 | 3.98 |
| 050 | MANUFACTURING AND INDUSTRIAL | 52.77 | 86.64 | 14.52 | 20.29 | 5.92 | 1.63 | 3.96 | 5.71 | 5.45 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 111.24 | 22.78 | 2.69 | 7.72 | 3.02 | 0.10 | 6.06 | 2.94 | 2.89 |
| 060 | SERVICE AND COMMERCIAL | 71.00 | 105.60 | 3.66 | 35.92 | 8.31 | 0.40 | 6.94 | 8.24 | 8.19 |
| 099 | OTHER (FUEL COMBUSTION) | 10.55 | 19.58 | 0.50 | 6.65 | 10.70 | 0.11 | 2.32 | 6.68 | 5.05 |
| 110 | SEWAGE TREATMENT | 0.25 | 0.39 | 0.28 | 1.30 | 0.03 | 0.25 | 0.70 | 0.02 | 0.02 |
| 120 | LANDFILLS | 0.85 | 0.67 | 0.21 | 1,184.38 | 0.89 | 9.78 | 7.93 | 0.40 | 0.35 |
| 130 | INCINERATORS | 1.01 | 1.77 | 0.14 | 0.94 | 0.23 | 0.09 | 0.17 | 0.11 | 0.10 |
| 140 | SOIL REMEDIATION | 0.06 | 0.09 | 0.03 | 0.50 | 0.11 | 0.00 | 0.34 | 0.04 | 0.03 |
| 199 | OTHER (WASTE DISPOSAL) | 0.01 | 0.10 | 0.00 | 60.49 | 0.36 | 32.42 | 5.74 | 0.25 | 0.25 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 8.64 | 0.00 | 0.00 | 0.85 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 179.16 | 0.00 | 0.00 | 100.14 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.11 | 0.16 | 0.04 | 122.82 | 0.32 | 0.03 | 114.41 | 0.30 | 0.29 |
| 240 | PRINTING | 0.01 | 0.05 | 0.00 | 25.44 | 0.05 | 0.04 | 25.44 | 0.05 | 0.04 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 35.94 | 0.01 | 0.00 | 31.89 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.03 | 0.19 | 0.00 | 10.18 | 0.02 | 2.06 | 7.31 | 0.02 | 0.02 |
| 310 | OIL AND GAS PRODUCTION | 1.91 | 3.32 | 0.53 | 104.63 | 0.10 | 0.00 | 54.09 | 0.08 | 0.08 |
| 320 | PETROLEUM REFINING | 6.03 | 9.85 | 58.06 | 49.04 | 3.99 | 1.85 | 38.43 | 2.54 | 2.08 |
| 330 | PETROLEUM MARKETING | 2.14 | 0.81 | 0.00 | 385.95 | 0.81 | 0.00 | 127.25 | 0.43 | 0.10 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.44 | 1.83 | 2.69 | 34.13 | 5.99 | 0.25 | 27.42 | 5.09 | 4.71 |
| 420 | FOOD AND AGRICULTURE | 2.71 | 9.60 | 2.52 | 23.37 | 29.67 | 0.07 | 21.19 | 12.05 | 2.79 |
| 430 | MINERAL PROCESSES | 35.78 | 56.51 | 17.60 | 7.02 | 94.51 | 0.07 | 5.66 | 54.45 | 24.48 |
| 440 | METAL PROCESSES | 1.85 | 1.65 | 0.20 | 2.19 | 2.31 | 0.00 | 1.59 | 1.61 | 1.21 |
| 450 | WOOD AND PAPER | 1.80 | 3.14 | 0.75 | 4.88 | 21.67 | 0.00 | 4.19 | 13.70 | 9.02 |
| 460 | GLASS AND RELATED PRODUCTS | 0.57 | 14.17 | 6.96 | 0.25 | 1.74 | 0.01 | 0.18 | 1.56 | 1.40 |
| 470 | ELECTRONICS | 0.01 | 0.03 | 0.00 | 1.18 | 0.10 | 0.00 | 0.95 | 0.05 | 0.03 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 10.37 | 9.31 | 0.85 | 22.72 | 18.20 | 8.82 | 18.42 | 11.70 | 7.86 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 306.81 | 0.00 | 0.00 | 260.55 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 111.88 | 0.00 | 0.00 | 109.22 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 39.54 | 0.00 | 37.45 | 32.49 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 20.03 | 0.03 | 0.00 | 19.22 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,741.05 | 130.57 | 8.59 | 276.37 | 270.84 | 12.36 | 121.21 | 253.79 | 244.63 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 2,145.29 | 147.04 | 467.32 | 171.62 | 72.64 | 17.07 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 415.09 | 0.00 | 0.00 | 203.10 | 20.30 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 798.73 | 0.00 | 0.00 | 365.18 | 54.79 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 235.99 | 0.00 | 0.00 | 140.25 | 14.02 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 1,718.35 | 0.00 | 0.00 | 1,016.94 | 135.06 |
| 660 | FIRES | 10.14 | 0.25 | 0.00 | 1.02 | 1.17 | 0.00 | 0.71 | 1.15 | 1.08 |
| 670 | WASTE BURNING AND DISPOSAL | 793.31 | 27.23 | 1.05 | 107.93 | 92.67 | 4.64 | 59.49 | 90.31 | 83.67 |
| 690 | COOKING | 0.16 | 0.00 | 0.00 | 8.79 | 33.40 | 0.00 | 6.14 | 23.38 | 14.03 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.15 | 0.07 | 0.00 | 0.10 | 1.31 | 53.95 | 0.07 | 0.92 | 0.55 |
| 700 | On-Road Motor Vehicles | 12,726.85 | 2,315.33 | 11.27 | 1,343.71 | 74.73 | 0.00 | 1,233.16 | 74.09 | 57.91 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 41.86 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.32 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.73 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.82 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.20 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 249.71 | 54.02 | 2.81 | 40.28 | 9.03 | 0.00 | 35.91 | 8.81 | 8.72 |
| 820 | TRAINS | 28.90 | 194.16 | 8.05 | 13.29 | 4.40 | 0.00 | 11.12 | 4.40 | 4.05 |
| 830 | SHIPS AND COMMERCIAL BOATS | 38.84 | 276.79 | 109.70 | 17.62 | 20.28 | 0.00 | 14.77 | 19.62 | 18.94 |
| 840 | RECREATIONAL BOATS | 126.38 | 3.82 | 0.01 | 36.92 | 1.39 | 0.00 | 34.86 | 1.25 | 0.95 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 135.10 | 1.08 | 0.25 | 41.00 | 0.79 | 0.00 | 38.28 | 0.71 | 0.54 |
| 860 | OFF-ROAD EQUIPMENT | 1,536.69 | 680.34 | 3.49 | 259.95 | 39.17 | 0.00 | 225.28 | 38.76 | 35.39 |
| 870 | FARM EQUIPMENT | 101.24 | 106.20 | 0.72 | 24.87 | 6.47 | 0.00 | 21.29 | 6.46 | 5.93 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 50.46 | 0.00 | 0.00 | 50.28 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.21. Totals for Wednesday January 11, 2000 by Summary Category: Adjustment 2

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 56.74 | 51.59 | 4.76 | 30.99 | 6.82 | 2.35 | 4.97 | 6.35 | 5.89 |
| 020 | COGENERATION | 49.01 | 30.89 | 1.87 | 17.28 | 4.43 | 0.18 | 4.04 | 4.03 | 3.72 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.66 | 45.19 | 7.44 | 26.59 | 2.09 | 0.10 | 4.15 | 2.08 | 2.08 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 10.22 | 46.03 | 12.75 | 3.52 | 4.26 | 0.61 | 1.79 | 4.06 | 3.98 |
| 050 | MANUFACTURING AND INDUSTRIAL | 52.77 | 68.91 | 14.52 | 20.29 | 5.85 | 1.63 | 3.96 | 5.64 | 5.38 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 111.24 | 22.78 | 2.69 | 7.72 | 3.02 | 0.10 | 6.06 | 2.94 | 2.89 |
| 060 | SERVICE AND COMMERCIAL | 71.00 | 105.60 | 3.66 | 35.92 | 8.31 | 0.40 | 6.94 | 8.24 | 8.19 |
| 099 | OTHER (FUEL COMBUSTION) | 10.55 | 19.58 | 0.50 | 6.65 | 10.70 | 0.11 | 2.32 | 6.68 | 5.05 |
| 110 | SEWAGE TREATMENT | 0.25 | 0.39 | 0.28 | 1.30 | 0.03 | 0.25 | 0.70 | 0.02 | 0.02 |
| 120 | LANDFILLS | 0.85 | 0.67 | 0.21 | 1,184.38 | 0.89 | 9.78 | 7.93 | 0.40 | 0.35 |
| 130 | INCINERATORS | 1.01 | 1.77 | 0.14 | 0.94 | 0.23 | 0.09 | 0.17 | 0.11 | 0.10 |
| 140 | SOIL REMEDIATION | 0.06 | 0.09 | 0.03 | 0.50 | 0.11 | 0.00 | 0.34 | 0.04 | 0.03 |
| 199 | OTHER (WASTE DISPOSAL) | 0.01 | 0.10 | 0.00 | 60.49 | 0.36 | 32.42 | 5.74 | 0.25 | 0.25 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 8.64 | 0.00 | 0.00 | 0.85 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 179.16 | 0.00 | 0.00 | 100.14 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.11 | 0.16 | 0.04 | 122.82 | 0.32 | 0.03 | 114.41 | 0.30 | 0.29 |
| 240 | PRINTING | 0.01 | 0.05 | 0.00 | 25.44 | 0.05 | 0.04 | 25.44 | 0.05 | 0.04 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 35.94 | 0.01 | 0.00 | 31.89 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.03 | 0.19 | 0.00 | 10.18 | 0.02 | 2.06 | 7.31 | 0.02 | 0.02 |
| 310 | OIL AND GAS PRODUCTION | 1.91 | 3.32 | 0.53 | 104.63 | 0.10 | 0.00 | 54.09 | 0.08 | 0.08 |
| 320 | PETROLEUM REFINING | 6.03 | 9.85 | 58.06 | 49.04 | 3.99 | 1.85 | 38.43 | 2.54 | 2.08 |
| 330 | PETROLEUM MARKETING | 2.14 | 0.81 | 0.00 | 385.95 | 0.81 | 0.00 | 127.25 | 0.43 | 0.10 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.44 | 1.83 | 2.69 | 34.13 | 5.99 | 0.25 | 27.42 | 5.09 | 4.71 |
| 420 | FOOD AND AGRICULTURE | 2.71 | 9.60 | 2.52 | 23.37 | 29.67 | 0.07 | 21.19 | 12.05 | 2.79 |
| 430 | MINERAL PROCESSES | 35.78 | 56.51 | 17.60 | 7.02 | 94.51 | 0.07 | 5.66 | 54.45 | 24.48 |
| 440 | METAL PROCESSES | 1.85 | 1.65 | 0.20 | 2.19 | 2.31 | 0.00 | 1.59 | 1.61 | 1.21 |
| 450 | WOOD AND PAPER | 1.80 | 3.14 | 0.75 | 4.88 | 21.67 | 0.00 | 4.19 | 13.70 | 9.02 |
| 460 | GLASS AND RELATED PRODUCTS | 0.57 | 14.17 | 6.96 | 0.25 | 1.74 | 0.01 | 0.18 | 1.56 | 1.40 |
| 470 | ELECTRONICS | 0.01 | 0.03 | 0.00 | 1.18 | 0.10 | 0.00 | 0.95 | 0.05 | 0.03 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 10.37 | 9.31 | 0.85 | 22.72 | 18.20 | 8.82 | 18.42 | 11.70 | 7.86 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 306.81 | 0.00 | 0.00 | 260.55 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 111.88 | 0.00 | 0.00 | 109.22 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 39.54 | 0.00 | 37.45 | 32.49 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 20.03 | 0.03 | 0.00 | 19.22 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,741.05 | 130.57 | 8.59 | 276.37 | 270.84 | 12.36 | 121.21 | 253.79 | 244.63 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 1,956.39 | 144.57 | 429.38 | 156.51 | 71.45 | 16.93 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 415.09 | 0.00 | 0.00 | 203.10 | 20.30 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 798.73 | 0.00 | 0.00 | 365.18 | 54.79 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 235.99 | 0.00 | 0.00 | 140.25 | 14.02 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 1,718.35 | 0.00 | 0.00 | 1,016.94 | 135.06 |
| 660 | FIRES | 10.14 | 0.25 | 0.00 | 1.02 | 1.17 | 0.00 | 0.71 | 1.15 | 1.08 |
| 670 | WASTE BURNING AND DISPOSAL | 793.31 | 27.23 | 1.05 | 107.93 | 92.67 | 4.64 | 59.49 | 90.31 | 83.67 |
| 690 | COOKING | 0.16 | 0.00 | 0.00 | 8.79 | 35.45 | 0.00 | 6.14 | 24.82 | 14.89 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.15 | 0.07 | 0.00 | 0.10 | 1.31 | 53.95 | 0.07 | 0.92 | 0.55 |
| 700 | On-Road Motor Vehicles | 12,726.85 | 2,315.33 | 11.27 | 1,343.71 | 74.73 | 0.00 | 1,233.16 | 74.09 | 57.91 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 41.86 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.32 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.73 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.82 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.20 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 249.71 | 54.02 | 2.81 | 40.28 | 9.03 | 0.00 | 35.91 | 8.81 | 8.72 |
| 820 | TRAINS | 28.90 | 194.16 | 8.05 | 13.29 | 4.40 | 0.00 | 11.12 | 4.40 | 4.05 |
| 830 | SHIPS AND COMMERCIAL BOATS | 38.84 | 276.79 | 109.70 | 17.62 | 20.28 | 0.00 | 14.77 | 19.62 | 18.94 |
| 840 | RECREATIONAL BOATS | 126.38 | 3.82 | 0.01 | 36.92 | 1.39 | 0.00 | 34.86 | 1.25 | 0.95 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 135.10 | 1.08 | 0.25 | 41.00 | 0.79 | 0.00 | 38.28 | 0.71 | 0.54 |
| 860 | OFF-ROAD EQUIPMENT | 1,536.69 | 680.34 | 3.49 | 259.95 | 39.17 | 0.00 | 225.28 | 38.76 | 35.39 |
| 870 | FARM EQUIPMENT | 101.24 | 106.20 | 0.72 | 24.87 | 6.47 | 0.00 | 21.29 | 6.46 | 5.93 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 50.46 | 0.00 | 0.00 | 50.28 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

## Table 3.22. Totals for Wednesday January 11, 2005 by Summary Category: Baseline

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 58.04 | 32.36 | 3.29 | 37.73 | 17.61 | 1.99 | 5.70 | 17.24 | 16.86 |
| 020 | COGENERATION | 42.99 | 27.10 | 1.63 | 8.90 | 4.27 | 0.19 | 2.96 | 3.94 | 3.63 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.90 | 25.42 | 2.52 | 33.30 | 1.42 | 0.10 | 4.64 | 1.41 | 1.41 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 18.38 | 23.99 | 8.76 | 4.69 | 3.08 | 0.61 | 1.82 | 2.96 | 2.91 |
| 050 | MANUFACTURING AND INDUSTRIAL | 53.15 | 74.11 | 15.03 | 17.60 | 5.16 | 1.68 | 3.51 | 5.02 | 4.82 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 108.29 | 19.61 | 2.42 | 7.38 | 2.89 | 0.10 | 5.86 | 2.81 | 2.77 |
| 060 | SERVICE AND COMMERCIAL | 40.06 | 74.39 | 2.92 | 22.21 | 6.40 | 0.41 | 4.95 | 6.35 | 6.31 |
| 099 | OTHER (FUEL COMBUSTION) | 11.47 | 17.45 | 0.71 | 2.64 | 9.81 | 0.12 | 1.74 | 6.02 | 4.48 |
| 110 | SEWAGE TREATMENT | 0.31 | 0.40 | 0.08 | 1.56 | 0.03 | 0.27 | 0.86 | 0.03 | 0.03 |
| 120 | LANDFILLS | 1.06 | 1.06 | 0.51 | 1,259.44 | 1.11 | 10.49 | 8.48 | 0.57 | 0.51 |
| 130 | INCINERATORS | 1.00 | 1.82 | 0.12 | 0.63 | 0.25 | 0.10 | 0.11 | 0.14 | 0.13 |
| 140 | SOIL REMEDIATION | 0.00 | 0.03 | 0.00 | 2.78 | 0.38 | 0.00 | 0.26 | 0.14 | 0.05 |
| 199 | OTHER (WASTE DISPOSAL) | 0.04 | 0.07 | 0.00 | 68.76 | 0.10 | 36.35 | 6.45 | 0.05 | 0.04 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 8.15 | 0.00 | 0.00 | 0.78 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 95.66 | 0.00 | 0.00 | 34.49 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.04 | 0.11 | 0.00 | 88.68 | 0.96 | 0.03 | 84.65 | 0.92 | 0.88 |
| 240 | PRINTING | 0.19 | 0.02 | 0.00 | 19.98 | 0.05 | 0.04 | 19.97 | 0.05 | 0.05 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 28.67 | 0.01 | 0.00 | 25.55 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.16 | 0.15 | 0.02 | 9.64 | 0.12 | 2.06 | 6.90 | 0.11 | 0.11 |
| 310 | OIL AND GAS PRODUCTION | 1.35 | 2.77 | 0.54 | 80.36 | 0.06 | 0.00 | 41.57 | 0.06 | 0.05 |
| 320 | PETROLEUM REFINING | 9.83 | 7.79 | 64.77 | 25.77 | 3.16 | 1.85 | 18.31 | 2.05 | 1.74 |
| 330 | PETROLEUM MARKETING | 0.68 | 0.18 | 0.00 | 360.83 | 0.84 | 0.00 | 82.27 | 0.45 | 0.12 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.38 | 1.78 | 4.21 | 27.02 | 5.49 | 0.25 | 21.52 | 4.67 | 4.36 |
| 420 | FOOD AND AGRICULTURE | 2.49 | 9.26 | 0.96 | 18.01 | 24.90 | 0.07 | 16.62 | 10.90 | 2.82 |
| 430 | MINERAL PROCESSES | 40.21 | 57.74 | 19.60 | 4.65 | 122.90 | 0.08 | 3.78 | 64.36 | 24.48 |
| 440 | METAL PROCESSES | 1.68 | 1.32 | 0.03 | 0.70 | 1.73 | 0.00 | 0.55 | 1.18 | 0.86 |
| 450 | WOOD AND PAPER | 1.41 | 2.25 | 0.13 | 4.09 | 21.17 | 0.00 | 3.38 | 13.57 | 8.82 |
| 460 | GLASS AND RELATED PRODUCTS | 0.21 | 10.82 | 3.93 | 0.54 | 1.96 | 0.01 | 0.38 | 1.75 | 1.57 |
| 470 | ELECTRONICS | 0.00 | 0.00 | 0.00 | 1.15 | 0.11 | 0.00 | 0.92 | 0.05 | 0.03 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 4.24 | 6.98 | 0.80 | 17.21 | 16.40 | 8.82 | 14.60 | 11.32 | 6.93 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 279.00 | 0.00 | 0.00 | 236.70 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 91.11 | 0.00 | 0.00 | 88.30 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 42.31 | 0.00 | 35.32 | 34.76 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 20.89 | 0.03 | 0.00 | 20.05 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,768.52 | 124.18 | 8.10 | 274.06 | 271.21 | 12.58 | 120.19 | 254.12 | 244.94 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 1,459.67 | 144.22 | 490.12 | 116.77 | 72.13 | 17.91 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 400.62 | 0.00 | 0.00 | 196.02 | 19.59 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 796.93 | 0.00 | 0.00 | 364.36 | 54.67 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 228.57 | 0.00 | 0.00 | 135.84 | 13.58 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 365.44 | 0.00 | 0.00 | 213.10 | 28.72 |
| 660 | FIRES | 10.42 | 0.25 | 0.00 | 1.05 | 1.21 | 0.00 | 0.73 | 1.19 | 1.12 |
| 670 | WASTE BURNING AND DISPOSAL | 785.52 | 26.49 | 1.03 | 106.59 | 91.61 | 4.54 | 58.72 | 89.27 | 82.68 |
| 690 | COOKING | 0.17 | 0.00 | 0.00 | 9.14 | 35.46 | 0.00 | 6.38 | 24.82 | 14.89 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.25 | 0.07 | 0.00 | 0.11 | 1.44 | 58.79 | 0.08 | 1.01 | 0.60 |
| 700 | On-Road Motor Vehicles | 8,614.13 | 2,239.64 | 13.95 | 932.32 | 88.99 | 0.00 | 853.18 | 88.22 | 68.52 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.69 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.40 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.47 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.66 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.58 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 265.10 | 57.28 | 3.84 | 39.97 | 8.96 | 0.00 | 35.63 | 8.70 | 8.49 |
| 820 | TRAINS | 31.90 | 153.24 | 7.16 | 14.09 | 4.63 | 0.00 | 11.79 | 4.63 | 4.26 |
| 830 | SHIPS AND COMMERCIAL BOATS | 44.27 | 323.30 | 146.54 | 18.66 | 25.32 | 0.00 | 15.64 | 24.46 | 23.66 |
| 840 | RECREATIONAL BOATS | 125.23 | 5.61 | 0.01 | 33.95 | 1.50 | 0.00 | 32.32 | 1.35 | 1.02 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 131.72 | 1.33 | 0.29 | 50.65 | 0.69 | 0.00 | 47.53 | 0.62 | 0.47 |
| 860 | OFF-ROAD EQUIPMENT | 1,362.68 | 614.75 | 3.79 | 228.62 | 36.34 | 0.00 | 199.70 | 35.93 | 32.73 |
| 870 | FARM EQUIPMENT | 88.59 | 89.02 | 0.70 | 20.93 | 5.52 | 0.00 | 18.01 | 5.51 | 5.05 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 35.20 | 0.00 | 0.00 | 35.07 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.23. Totals for Wednesday January 11, 2005 by Summary Category: Adjustment 1

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 58.04 | 32.51 | 3.29 | 38.41 | 17.61 | 1.99 | 5.76 | 17.24 | 16.86 |
| 020 | COGENERATION | 42.99 | 27.11 | 1.63 | 8.91 | 4.27 | 0.19 | 2.96 | 3.94 | 3.63 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.90 | 25.43 | 2.52 | 33.35 | 1.42 | 0.10 | 4.65 | 1.41 | 1.41 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 18.38 | 23.99 | 8.76 | 4.69 | 3.08 | 0.61 | 1.82 | 2.96 | 2.91 |
| 050 | MANUFACTURING AND INDUSTRIAL | 53.15 | 74.49 | 15.03 | 17.61 | 5.16 | 1.68 | 3.51 | 5.02 | 4.82 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 108.29 | 19.76 | 2.42 | 7.39 | 2.89 | 0.10 | 5.87 | 2.81 | 2.77 |
| 060 | SERVICE AND COMMERCIAL | 40.06 | 75.25 | 2.92 | 22.28 | 6.40 | 0.41 | 4.96 | 6.35 | 6.31 |
| 099 | OTHER (FUEL COMBUSTION) | 11.47 | 17.73 | 0.71 | 2.66 | 9.81 | 0.12 | 1.75 | 6.01 | 4.48 |
| 110 | SEWAGE TREATMENT | 0.31 | 0.40 | 0.08 | 1.56 | 0.03 | 0.27 | 0.86 | 0.03 | 0.03 |
| 120 | LANDFILLS | 1.06 | 1.06 | 0.51 | 1,261.55 | 1.11 | 10.49 | 8.50 | 0.57 | 0.51 |
| 130 | INCINERATORS | 1.00 | 1.82 | 0.12 | 0.63 | 0.25 | 0.10 | 0.11 | 0.14 | 0.13 |
| 140 | SOIL REMEDIATION | 0.00 | 0.03 | 0.00 | 2.86 | 0.38 | 0.00 | 0.27 | 0.14 | 0.05 |
| 199 | OTHER (WASTE DISPOSAL) | 0.04 | 0.07 | 0.00 | 68.76 | 0.10 | 36.35 | 6.45 | 0.05 | 0.04 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 8.20 | 0.00 | 0.00 | 0.78 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 95.98 | 0.00 | 0.00 | 34.70 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.04 | 0.11 | 0.00 | 89.06 | 0.96 | 0.03 | 85.01 | 0.92 | 0.88 |
| 240 | PRINTING | 0.19 | 0.02 | 0.00 | 20.12 | 0.05 | 0.04 | 20.11 | 0.05 | 0.05 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 28.76 | 0.01 | 0.00 | 25.64 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.16 | 0.15 | 0.02 | 9.64 | 0.12 | 2.06 | 6.90 | 0.11 | 0.11 |
| 310 | OIL AND GAS PRODUCTION | 1.35 | 2.78 | 0.54 | 80.92 | 0.06 | 0.00 | 41.79 | 0.06 | 0.05 |
| 320 | PETROLEUM REFINING | 9.83 | 7.79 | 64.77 | 25.77 | 3.16 | 1.85 | 18.31 | 2.05 | 1.74 |
| 330 | PETROLEUM MARKETING | 0.68 | 0.18 | 0.00 | 364.66 | 0.84 | 0.00 | 82.70 | 0.45 | 0.12 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.38 | 1.79 | 4.21 | 27.12 | 5.49 | 0.25 | 21.59 | 4.67 | 4.36 |
| 420 | FOOD AND AGRICULTURE | 2.49 | 9.27 | 0.96 | 18.06 | 24.90 | 0.07 | 16.67 | 10.90 | 2.82 |
| 430 | MINERAL PROCESSES | 40.21 | 57.77 | 19.60 | 4.67 | 122.90 | 0.08 | 3.80 | 64.36 | 24.48 |
| 440 | METAL PROCESSES | 1.68 | 1.32 | 0.03 | 0.70 | 1.73 | 0.00 | 0.55 | 1.18 | 0.86 |
| 450 | WOOD AND PAPER | 1.41 | 2.26 | 0.13 | 4.13 | 21.17 | 0.00 | 3.41 | 13.57 | 8.82 |
| 460 | GLASS AND RELATED PRODUCTS | 0.21 | 10.82 | 3.93 | 0.54 | 1.96 | 0.01 | 0.38 | 1.75 | 1.57 |
| 470 | ELECTRONICS | 0.00 | 0.00 | 0.00 | 1.15 | 0.11 | 0.00 | 0.92 | 0.05 | 0.03 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 4.24 | 6.98 | 0.80 | 17.22 | 16.40 | 8.82 | 14.60 | 11.32 | 6.93 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 280.47 | 0.00 | 0.00 | 237.95 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 91.57 | 0.00 | 0.00 | 88.74 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 36.82 | 0.00 | 35.32 | 30.25 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 21.14 | 0.03 | 0.00 | 20.28 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,768.52 | 125.82 | 8.10 | 276.14 | 271.21 | 12.58 | 121.10 | 254.12 | 244.94 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 2,262.25 | 139.39 | 490.12 | 180.98 | 69.94 | 17.58 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 400.62 | 0.00 | 0.00 | 196.02 | 19.59 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 786.14 | 0.00 | 0.00 | 359.42 | 53.93 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 227.66 | 0.00 | 0.00 | 135.30 | 13.52 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 364.84 | 0.00 | 0.00 | 212.83 | 28.68 |
| 660 | FIRES | 10.42 | 0.25 | 0.00 | 1.05 | 1.21 | 0.00 | 0.74 | 1.19 | 1.12 |
| 670 | WASTE BURNING AND DISPOSAL | 785.52 | 26.88 | 1.03 | 106.82 | 91.61 | 4.54 | 58.83 | 89.27 | 82.67 |
| 690 | COOKING | 0.17 | 0.00 | 0.00 | 9.15 | 35.46 | 0.00 | 6.40 | 24.82 | 14.89 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.25 | 0.07 | 0.00 | 0.11 | 1.44 | 58.79 | 0.08 | 1.01 | 0.60 |
| 700 | On-Road Motor Vehicles | 8,552.31 | 1,974.91 | 12.13 | 915.38 | 78.48 | 0.00 | 839.00 | 77.71 | 58.93 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.69 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.40 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.47 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.66 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.58 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 265.52 | 57.28 | 3.84 | 39.94 | 8.93 | 0.00 | 35.60 | 8.67 | 8.46 |
| 820 | TRAINS | 31.90 | 153.24 | 7.16 | 14.09 | 4.63 | 0.00 | 11.79 | 4.63 | 4.26 |
| 830 | SHIPS AND COMMERCIAL BOATS | 44.27 | 323.30 | 146.54 | 18.66 | 25.32 | 0.00 | 15.64 | 24.46 | 23.66 |
| 840 | RECREATIONAL BOATS | 125.23 | 5.61 | 0.01 | 33.95 | 1.49 | 0.00 | 32.32 | 1.35 | 1.02 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 131.72 | 1.33 | 0.29 | 50.65 | 0.69 | 0.00 | 47.53 | 0.62 | 0.47 |
| 860 | OFF-ROAD EQUIPMENT | 1,362.68 | 614.15 | 3.79 | 228.62 | 36.12 | 0.00 | 199.70 | 35.72 | 32.54 |
| 870 | FARM EQUIPMENT | 88.59 | 89.02 | 0.70 | 20.93 | 5.51 | 0.00 | 18.01 | 5.50 | 5.04 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 35.20 | 0.00 | 0.00 | 35.07 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.24. Totals for Wednesday January 11, 2005 by Summary Category: Adjustment 2

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 58.04 | 32.51 | 3.29 | 38.41 | 17.61 | 1.99 | 5.76 | 17.24 | 16.86 |
| 020 | COGENERATION | 42.99 | 27.11 | 1.63 | 8.91 | 4.27 | 0.19 | 2.96 | 3.94 | 3.63 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.90 | 25.43 | 2.52 | 33.35 | 1.42 | 0.10 | 4.65 | 1.41 | 1.41 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 18.38 | 23.99 | 8.76 | 4.69 | 3.08 | 0.61 | 1.82 | 2.96 | 2.91 |
| 050 | MANUFACTURING AND INDUSTRIAL | 53.15 | 59.41 | 15.03 | 17.61 | 5.07 | 1.68 | 3.51 | 4.93 | 4.74 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 108.29 | 19.76 | 2.42 | 7.39 | 2.89 | 0.10 | 5.87 | 2.81 | 2.77 |
| 060 | SERVICE AND COMMERCIAL | 40.06 | 75.25 | 2.92 | 22.28 | 6.40 | 0.41 | 4.96 | 6.35 | 6.31 |
| 099 | OTHER (FUEL COMBUSTION) | 11.47 | 17.73 | 0.71 | 2.66 | 9.81 | 0.12 | 1.75 | 6.01 | 4.48 |
| 110 | SEWAGE TREATMENT | 0.31 | 0.40 | 0.08 | 1.56 | 0.03 | 0.27 | 0.86 | 0.03 | 0.03 |
| 120 | LANDFILLS | 1.06 | 1.06 | 0.51 | 1,261.55 | 1.11 | 10.49 | 8.50 | 0.57 | 0.51 |
| 130 | INCINERATORS | 1.00 | 1.82 | 0.12 | 0.63 | 0.25 | 0.10 | 0.11 | 0.14 | 0.13 |
| 140 | SOIL REMEDIATION | 0.00 | 0.03 | 0.00 | 2.86 | 0.38 | 0.00 | 0.27 | 0.14 | 0.05 |
| 199 | OTHER (WASTE DISPOSAL) | 0.04 | 0.07 | 0.00 | 68.76 | 0.10 | 36.35 | 6.45 | 0.05 | 0.04 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 8.20 | 0.00 | 0.00 | 0.78 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 95.98 | 0.00 | 0.00 | 34.70 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.04 | 0.11 | 0.00 | 89.06 | 0.96 | 0.03 | 85.01 | 0.92 | 0.88 |
| 240 | PRINTING | 0.19 | 0.02 | 0.00 | 20.12 | 0.05 | 0.04 | 20.11 | 0.05 | 0.05 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 28.76 | 0.01 | 0.00 | 25.64 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.16 | 0.15 | 0.02 | 9.64 | 0.12 | 2.06 | 6.90 | 0.11 | 0.11 |
| 310 | OIL AND GAS PRODUCTION | 1.35 | 2.78 | 0.54 | 80.92 | 0.06 | 0.00 | 41.79 | 0.06 | 0.05 |
| 320 | PETROLEUM REFINING | 9.83 | 7.79 | 64.77 | 25.77 | 3.16 | 1.85 | 18.31 | 2.05 | 1.74 |
| 330 | PETROLEUM MARKETING | 0.68 | 0.18 | 0.00 | 364.66 | 0.84 | 0.00 | 82.70 | 0.45 | 0.12 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.38 | 1.79 | 4.21 | 27.12 | 5.49 | 0.25 | 21.59 | 4.67 | 4.36 |
| 420 | FOOD AND AGRICULTURE | 2.49 | 9.27 | 0.96 | 18.06 | 24.90 | 0.07 | 16.67 | 10.90 | 2.82 |
| 430 | MINERAL PROCESSES | 40.21 | 57.77 | 19.60 | 4.67 | 122.90 | 0.08 | 3.80 | 64.36 | 24.48 |
| 440 | METAL PROCESSES | 1.68 | 1.32 | 0.03 | 0.70 | 1.73 | 0.00 | 0.55 | 1.18 | 0.86 |
| 450 | WOOD AND PAPER | 1.41 | 2.26 | 0.13 | 4.13 | 21.17 | 0.00 | 3.41 | 13.57 | 8.82 |
| 460 | GLASS AND RELATED PRODUCTS | 0.21 | 10.82 | 3.93 | 0.54 | 1.96 | 0.01 | 0.38 | 1.75 | 1.57 |
| 470 | ELECTRONICS | 0.00 | 0.00 | 0.00 | 1.15 | 0.11 | 0.00 | 0.92 | 0.05 | 0.03 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 4.24 | 6.98 | 0.80 | 17.22 | 16.40 | 8.82 | 14.60 | 11.32 | 6.93 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 280.47 | 0.00 | 0.00 | 237.95 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 91.57 | 0.00 | 0.00 | 88.74 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 36.82 | 0.00 | 35.32 | 30.25 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 21.14 | 0.03 | 0.00 | 20.28 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,768.52 | 125.82 | 8.10 | 276.14 | 270.52 | 12.58 | 121.10 | 253.47 | 244.31 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 2,050.34 | 136.72 | 447.10 | 164.03 | 68.65 | 17.44 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 400.62 | 0.00 | 0.00 | 196.02 | 19.59 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 786.14 | 0.00 | 0.00 | 359.42 | 53.93 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 227.66 | 0.00 | 0.00 | 135.30 | 13.52 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 364.84 | 0.00 | 0.00 | 212.83 | 28.68 |
| 660 | FIRES | 10.42 | 0.25 | 0.00 | 1.05 | 1.21 | 0.00 | 0.74 | 1.19 | 1.12 |
| 670 | WASTE BURNING AND DISPOSAL | 698.44 | 19.46 | 0.88 | 92.30 | 81.16 | 3.16 | 50.56 | 79.02 | 73.01 |
| 690 | COOKING | 0.17 | 0.00 | 0.00 | 9.15 | 37.52 | 0.00 | 6.40 | 26.27 | 15.76 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.25 | 0.07 | 0.00 | 0.11 | 1.44 | 58.79 | 0.08 | 1.01 | 0.60 |
| 700 | On-Road Motor Vehicles | 8,552.31 | 1,974.91 | 12.13 | 915.38 | 78.48 | 0.00 | 839.00 | 77.71 | 58.93 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.69 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.40 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.47 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.66 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.58 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 265.52 | 57.28 | 3.84 | 39.94 | 8.93 | 0.00 | 35.60 | 8.67 | 8.46 |
| 820 | TRAINS | 31.90 | 153.24 | 7.16 | 14.09 | 4.63 | 0.00 | 11.79 | 4.63 | 4.26 |
| 830 | SHIPS AND COMMERCIAL BOATS | 44.27 | 323.30 | 146.54 | 18.66 | 25.32 | 0.00 | 15.64 | 24.46 | 23.66 |
| 840 | RECREATIONAL BOATS | 125.23 | 5.61 | 0.01 | 33.95 | 1.49 | 0.00 | 32.32 | 1.35 | 1.02 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 131.72 | 1.33 | 0.29 | 50.65 | 0.69 | 0.00 | 47.53 | 0.62 | 0.47 |
| 860 | OFF-ROAD EQUIPMENT | 1,362.68 | 614.15 | 3.79 | 228.62 | 36.12 | 0.00 | 199.70 | 35.72 | 32.54 |
| 870 | FARM EQUIPMENT | 88.59 | 89.02 | 0.70 | 20.93 | 5.51 | 0.00 | 18.01 | 5.50 | 5.04 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 35.20 | 0.00 | 0.00 | 35.07 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.25. Totals for Wednesday January 11, 2014 by Summary Category: Baseline

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 77.05 | 35.25 | 3.51 | 41.12 | 35.11 | 2.17 | 6.27 | 34.67 | 34.28 |
| 020 | COGENERATION | 45.34 | 25.78 | 1.67 | 9.17 | 4.63 | 0.16 | 3.12 | 4.29 | 3.97 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.70 | 26.28 | 2.53 | 33.17 | 1.44 | 0.10 | 4.59 | 1.43 | 1.43 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 18.80 | 24.18 | 9.29 | 4.79 | 3.20 | 0.61 | 1.87 | 3.08 | 3.03 |
| 050 | MANUFACTURING AND INDUSTRIAL | 60.54 | 78.59 | 17.36 | 19.97 | 5.73 | 1.95 | 3.96 | 5.57 | 5.36 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 103.42 | 15.78 | 2.36 | 7.06 | 2.52 | 0.11 | 5.57 | 2.46 | 2.43 |
| 060 | SERVICE AND COMMERCIAL | 43.17 | 71.17 | 3.00 | 24.10 | 6.82 | 0.46 | 5.34 | 6.76 | 6.72 |
| 099 | OTHER (FUEL COMBUSTION) | 11.49 | 13.83 | 0.81 | 2.76 | 11.02 | 0.15 | 1.25 | 6.64 | 4.90 |
| 110 | SEWAGE TREATMENT | 0.36 | 0.45 | 0.10 | 1.78 | 0.04 | 0.30 | 0.98 | 0.03 | 0.03 |
| 120 | LANDFILLS | 1.24 | 1.22 | 0.56 | 1,411.70 | 1.27 | 11.40 | 9.52 | 0.64 | 0.57 |
| 130 | INCINERATORS | 1.08 | 1.88 | 0.12 | 0.74 | 0.29 | 0.12 | 0.12 | 0.17 | 0.15 |
| 140 | SOIL REMEDIATION | 0.00 | 0.05 | 0.01 | 3.33 | 0.46 | 0.00 | 0.31 | 0.17 | 0.06 |
| 199 | OTHER (WASTE DISPOSAL) | 0.05 | 0.08 | 0.00 | 65.60 | 0.12 | 41.64 | 6.34 | 0.06 | 0.05 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 9.04 | 0.00 | 0.00 | 0.89 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 109.91 | 0.00 | 0.00 | 37.93 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.07 | 0.12 | 0.00 | 97.82 | 1.27 | 0.04 | 93.28 | 1.22 | 1.17 |
| 240 | PRINTING | 0.22 | 0.03 | 0.00 | 20.55 | 0.06 | 0.05 | 20.54 | 0.06 | 0.06 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 29.68 | 0.01 | 0.00 | 26.47 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.18 | 0.18 | 0.03 | 12.13 | 0.08 | 2.06 | 8.68 | 0.07 | 0.07 |
| 310 | OIL AND GAS PRODUCTION | 1.23 | 2.76 | 0.55 | 77.65 | 0.06 | 0.00 | 38.72 | 0.05 | 0.05 |
| 320 | PETROLEUM REFINING | 6.93 | 7.31 | 66.95 | 25.36 | 2.98 | 1.85 | 17.47 | 1.93 | 1.63 |
| 330 | PETROLEUM MARKETING | 0.82 | 0.18 | 0.00 | 398.88 | 0.98 | 0.00 | 88.45 | 0.52 | 0.12 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.45 | 2.09 | 4.67 | 32.50 | 6.70 | 0.30 | 25.67 | 5.70 | 5.32 |
| 420 | FOOD AND AGRICULTURE | 2.45 | 9.03 | 0.97 | 20.34 | 25.13 | 0.07 | 18.89 | 10.83 | 2.76 |
| 430 | MINERAL PROCESSES | 46.85 | 66.37 | 22.76 | 5.36 | 129.41 | 0.09 | 4.35 | 68.18 | 26.79 |
| 440 | METAL PROCESSES | 2.37 | 1.27 | 0.04 | 0.79 | 2.07 | 0.00 | 0.63 | 1.43 | 1.04 |
| 450 | WOOD AND PAPER | 1.69 | 2.67 | 0.16 | 4.84 | 25.25 | 0.00 | 4.01 | 16.21 | 10.55 |
| 460 | GLASS AND RELATED PRODUCTS | 0.25 | 11.28 | 4.68 | 0.63 | 2.28 | 0.01 | 0.44 | 2.05 | 1.86 |
| 470 | ELECTRONICS | 0.00 | 0.01 | 0.00 | 1.34 | 0.13 | 0.00 | 1.08 | 0.06 | 0.04 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 4.69 | 7.76 | 0.82 | 18.45 | 19.15 | 8.83 | 15.61 | 13.18 | 7.98 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 299.02 | 0.00 | 0.00 | 254.66 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 82.23 | 0.00 | 0.00 | 79.65 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 40.20 | 0.00 | 33.13 | 33.03 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 21.94 | 0.04 | 0.00 | 21.01 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,826.77 | 122.29 | 7.75 | 268.13 | 267.94 | 13.00 | 117.56 | 251.09 | 242.04 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 1,570.24 | 144.64 | 548.05 | 125.62 | 73.72 | 19.80 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 456.47 | 0.00 | 0.00 | 223.35 | 22.32 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 896.13 | 0.00 | 0.00 | 409.71 | 61.47 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 233.93 | 0.00 | 0.00 | 139.02 | 13.90 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 148.77 | 0.00 | 0.00 | 84.54 | 11.69 |
| 660 | FIRES | 10.98 | 0.26 | 0.00 | 1.11 | 1.29 | 0.00 | 0.77 | 1.27 | 1.19 |
| 670 | WASTE BURNING AND DISPOSAL | 773.52 | 25.86 | 1.01 | 104.84 | 89.92 | 4.37 | 57.70 | 87.61 | 81.10 |
| 690 | COOKING | 0.19 | 0.00 | 0.00 | 10.42 | 40.46 | 0.00 | 7.28 | 28.32 | 16.99 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.46 | 0.08 | 0.00 | 0.13 | 1.67 | 65.19 | 0.09 | 1.17 | 0.70 |
| 700 | On-Road Motor Vehicles | 4,338.42 | 1,156.05 | 5.07 | 485.63 | 68.67 | 0.00 | 439.40 | 67.77 | 48.82 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 18.15 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.95 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.09 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.74 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 320.82 | 77.41 | 4.95 | 49.90 | 10.51 | 0.00 | 44.49 | 10.20 | 9.95 |
| 820 | TRAINS | 38.76 | 123.62 | 0.12 | 13.91 | 4.18 | 0.00 | 11.64 | 4.18 | 3.84 |
| 830 | SHIPS AND COMMERCIAL BOATS | 55.82 | 416.03 | 228.62 | 19.71 | 35.29 | 0.00 | 16.51 | 33.99 | 33.02 |
| 840 | RECREATIONAL BOATS | 123.53 | 6.29 | 0.01 | 30.52 | 2.40 | 0.00 | 29.35 | 2.16 | 1.64 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 165.21 | 1.98 | 0.42 | 61.02 | 0.88 | 0.00 | 57.16 | 0.80 | 0.60 |
| 860 | OFF-ROAD EQUIPMENT | 1,376.80 | 400.70 | 0.92 | 147.02 | 22.65 | 0.00 | 130.08 | 22.25 | 20.07 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 870 | FARM EQUIPMENT | 75.31 | 54.23 | 0.10 | 11.59 | 3.10 | 0.00 | 10.02 | 3.09 | 2.83 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 15.53 | 0.00 | 0.00 | 15.48 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

## Table 3.26. Totals for Wednesday January 11, 2014 by Summary Category: Adjustment 1

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 77.05 | 35.52 | 3.51 | 41.84 | 35.11 | 2.17 | 6.34 | 34.67 | 34.28 |
| 020 | COGENERATION | 45.34 | 25.78 | 1.67 | 9.17 | 4.63 | 0.16 | 3.12 | 4.29 | 3.97 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.70 | 26.30 | 2.53 | 33.22 | 1.44 | 0.10 | 4.59 | 1.43 | 1.43 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 18.80 | 24.18 | 9.29 | 4.79 | 3.20 | 0.61 | 1.87 | 3.08 | 3.03 |
| 050 | MANUFACTURING AND INDUSTRIAL | 60.54 | 79.06 | 17.36 | 19.99 | 5.73 | 1.95 | 3.96 | 5.57 | 5.36 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 103.42 | 15.90 | 2.36 | 7.07 | 2.52 | 0.11 | 5.57 | 2.46 | 2.43 |
| 060 | SERVICE AND COMMERCIAL | 43.17 | 72.10 | 3.00 | 24.16 | 6.82 | 0.46 | 5.36 | 6.76 | 6.72 |
| 099 | OTHER (FUEL COMBUSTION) | 11.49 | 14.06 | 0.81 | 2.78 | 11.02 | 0.15 | 1.27 | 6.64 | 4.89 |
| 110 | SEWAGE TREATMENT | 0.36 | 0.45 | 0.10 | 1.79 | 0.04 | 0.30 | 0.98 | 0.03 | 0.03 |
| 120 | LANDFILLS | 1.24 | 1.22 | 0.56 | 1,413.73 | 1.27 | 11.40 | 9.53 | 0.64 | 0.57 |
| 130 | INCINERATORS | 1.08 | 1.88 | 0.12 | 0.74 | 0.29 | 0.12 | 0.12 | 0.17 | 0.15 |
| 140 | SOIL REMEDIATION | 0.00 | 0.05 | 0.01 | 3.42 | 0.46 | 0.00 | 0.31 | 0.17 | 0.06 |
| 199 | OTHER (WASTE DISPOSAL) | 0.05 | 0.08 | 0.00 | 65.60 | 0.12 | 41.64 | 6.34 | 0.06 | 0.05 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 9.08 | 0.00 | 0.00 | 0.90 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 110.25 | 0.00 | 0.00 | 38.13 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.07 | 0.12 | 0.00 | 98.23 | 1.27 | 0.04 | 93.68 | 1.22 | 1.17 |
| 240 | PRINTING | 0.22 | 0.03 | 0.00 | 20.70 | 0.06 | 0.05 | 20.69 | 0.06 | 0.06 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 29.76 | 0.01 | 0.00 | 26.54 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.18 | 0.18 | 0.03 | 12.14 | 0.08 | 2.06 | 8.68 | 0.07 | 0.07 |
| 310 | OIL AND GAS PRODUCTION | 1.23 | 2.78 | 0.55 | 78.18 | 0.06 | 0.00 | 38.92 | 0.05 | 0.05 |
| 320 | PETROLEUM REFINING | 6.93 | 7.31 | 66.95 | 25.36 | 2.98 | 1.85 | 17.47 | 1.93 | 1.63 |
| 330 | PETROLEUM MARKETING | 0.82 | 0.19 | 0.00 | 403.60 | 0.98 | 0.00 | 88.91 | 0.52 | 0.12 |
| 399 | OTHER (PETROLEUM PRODN AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.45 | 2.10 | 4.67 | 32.61 | 6.70 | 0.30 | 25.74 | 5.70 | 5.32 |
| 420 | FOOD AND AGRICULTURE | 2.45 | 9.04 | 0.97 | 20.40 | 25.13 | 0.07 | 18.94 | 10.83 | 2.76 |
| 430 | MINERAL PROCESSES | 46.85 | 66.40 | 22.76 | 5.38 | 129.41 | 0.09 | 4.37 | 68.18 | 26.79 |
| 440 | METAL PROCESSES | 2.37 | 1.27 | 0.04 | 0.79 | 2.07 | 0.00 | 0.63 | 1.43 | 1.04 |
| 450 | WOOD AND PAPER | 1.69 | 2.68 | 0.16 | 4.88 | 25.25 | 0.00 | 4.05 | 16.21 | 10.55 |
| 460 | GLASS AND RELATED PRODUCTS | 0.25 | 11.28 | 4.68 | 0.63 | 2.28 | 0.01 | 0.44 | 2.05 | 1.86 |
| 470 | ELECTRONICS | 0.00 | 0.01 | 0.00 | 1.34 | 0.13 | 0.00 | 1.08 | 0.06 | 0.04 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 4.69 | 7.76 | 0.82 | 18.45 | 19.15 | 8.83 | 15.61 | 13.18 | 7.98 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 288.67 | 0.00 | 0.00 | 245.85 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 82.70 | 0.00 | 0.00 | 80.11 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 36.39 | 0.00 | 33.13 | 29.90 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 22.18 | 0.04 | 0.00 | 21.24 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,826.77 | 123.99 | 7.75 | 270.15 | 267.93 | 13.00 | 118.44 | 251.08 | 242.04 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 2,300.53 | 144.64 | 548.05 | 184.04 | 73.72 | 19.80 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 456.47 | 0.00 | 0.00 | 223.35 | 22.32 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 888.00 | 0.00 | 0.00 | 406.00 | 60.92 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 233.93 | 0.00 | 0.00 | 139.03 | 13.90 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 148.77 | 0.00 | 0.00 | 84.54 | 11.69 |
| 660 | FIRES | 10.98 | 0.27 | 0.00 | 1.11 | 1.29 | 0.00 | 0.78 | 1.27 | 1.19 |
| 670 | WASTE BURNING AND DISPOSAL | 773.52 | 26.23 | 1.01 | 105.06 | 89.92 | 4.37 | 57.80 | 87.61 | 81.10 |
| 690 | COOKING | 0.19 | 0.00 | 0.00 | 10.44 | 40.46 | 0.00 | 7.29 | 28.32 | 16.99 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.46 | 0.08 | 0.00 | 0.13 | 1.67 | 65.19 | 0.09 | 1.17 | 0.70 |
| 700 | On-Road Motor Vehicles | 4,338.42 | 1,054.04 | 5.07 | 483.52 | 67.57 | 0.00 | 437.49 | 66.68 | 48.02 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 18.15 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.95 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.09 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.74 | 0.00 | 0.00 | 0.00 |
| 732 | LT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 | 0.00 | 0.00 | 0.00 |
| 733 | LT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.00 | 0.00 | 0.00 |
| 734 | MED HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 742 | LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 743 | LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 313.27 | 77.41 | 4.90 | 46.35 | 9.60 | 0.00 | 41.32 | 9.32 | 9.07 |
| 820 | TRAINS | 38.76 | 123.62 | 0.12 | 13.91 | 4.18 | 0.00 | 11.64 | 4.18 | 3.84 |
| 830 | SHIPS AND COMMERCIAL BOATS | 55.82 | 414.81 | 215.17 | 19.71 | 33.57 | 0.00 | 16.51 | 32.33 | 31.40 |
| 840 | RECREATIONAL BOATS | 123.53 | 6.29 | 0.01 | 30.52 | 2.40 | 0.00 | 29.35 | 2.16 | 1.64 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 165.21 | 1.98 | 0.42 | 61.02 | 0.88 | 0.00 | 57.16 | 0.79 | 0.60 |
| 860 | OFF-ROAD EQUIPMENT | 1,376.80 | 387.22 | 0.92 | 145.00 | 21.55 | 0.00 | 128.77 | 21.16 | 19.06 |
| 870 | FARM EQUIPMENT | 75.31 | 54.11 | 0.10 | 11.56 | 3.10 | 0.00 | 9.99 | 3.09 | 2.82 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 15.53 | 0.00 | 0.00 | 15.48 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.27. Totals for Wednesday January 11, 2014 by Summary Category: Adjustment 2

| EIC3 | DESCRIPTION | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|---|
| 010 | ELECTRIC UTILITIES | 77.05 | 35.52 | 3.51 | 41.84 | 35.11 | 2.17 | 6.34 | 34.67 | 34.28 |
| 020 | COGENERATION | 45.34 | 25.78 | 1.67 | 9.17 | 4.63 | 0.16 | 3.12 | 4.29 | 3.97 |
| 030 | OIL AND GAS PRODUCTION (COMBUSTION) | 22.70 | 26.30 | 2.53 | 33.22 | 1.44 | 0.10 | 4.59 | 1.43 | 1.43 |
| 040 | PETROLEUM REFINING (COMBUSTION) | 18.80 | 24.18 | 9.29 | 4.79 | 3.20 | 0.61 | 1.87 | 3.08 | 3.03 |
| 050 | MANUFACTURING AND INDUSTRIAL | 60.54 | 58.30 | 17.36 | 19.99 | 5.62 | 1.95 | 3.96 | 5.47 | 5.26 |
| 052 | FOOD AND AGRICULTURAL PROCESSING | 103.42 | 12.06 | 2.36 | 7.07 | 2.52 | 0.11 | 5.57 | 2.46 | 2.43 |
| 060 | SERVICE AND COMMERCIAL | 43.17 | 71.92 | 3.00 | 24.16 | 6.82 | 0.46 | 5.36 | 6.76 | 6.72 |
| 099 | OTHER (FUEL COMBUSTION) | 11.49 | 14.06 | 0.81 | 2.78 | 11.02 | 0.15 | 1.27 | 6.64 | 4.89 |
| 110 | SEWAGE TREATMENT | 0.36 | 0.45 | 0.10 | 1.79 | 0.04 | 0.30 | 0.98 | 0.03 | 0.03 |
| 120 | LANDFILLS | 1.24 | 1.22 | 0.56 | 1,413.73 | 1.27 | 11.40 | 9.53 | 0.64 | 0.57 |
| 130 | INCINERATORS | 1.08 | 1.88 | 0.12 | 0.74 | 0.29 | 0.12 | 0.12 | 0.17 | 0.15 |
| 140 | SOIL REMEDIATION | 0.00 | 0.05 | 0.01 | 3.42 | 0.46 | 0.00 | 0.31 | 0.17 | 0.06 |
| 199 | OTHER (WASTE DISPOSAL) | 0.05 | 0.08 | 0.00 | 65.60 | 0.12 | 41.64 | 6.34 | 0.06 | 0.05 |
| 210 | LAUNDERING | 0.00 | 0.00 | 0.00 | 9.08 | 0.00 | 0.00 | 0.90 | 0.00 | 0.00 |
| 220 | DEGREASING | 0.00 | 0.00 | 0.00 | 110.25 | 0.00 | 0.00 | 38.13 | 0.00 | 0.00 |
| 230 | COATINGS AND RELATED PROCESS SOLVENTS | 0.07 | 0.12 | 0.00 | 98.23 | 1.27 | 0.04 | 93.68 | 1.22 | 1.17 |
| 240 | PRINTING | 0.22 | 0.03 | 0.00 | 20.70 | 0.06 | 0.05 | 20.69 | 0.06 | 0.06 |
| 250 | ADHESIVES AND SEALANTS | 0.00 | 0.00 | 0.00 | 29.76 | 0.01 | 0.00 | 26.54 | 0.01 | 0.01 |
| 299 | OTHER (CLEANING AND SURFACE COATINGS) | 0.18 | 0.18 | 0.03 | 12.14 | 0.08 | 2.06 | 8.68 | 0.07 | 0.07 |
| 310 | OIL AND GAS PRODUCTION | 1.23 | 2.78 | 0.55 | 78.18 | 0.06 | 0.00 | 38.92 | 0.05 | 0.05 |
| 320 | PETROLEUM REFINING | 6.93 | 7.31 | 66.95 | 25.36 | 2.98 | 1.85 | 17.47 | 1.93 | 1.63 |
| 330 | PETROLEUM MARKETING | 0.82 | 0.19 | 0.00 | 403.60 | 0.98 | 0.00 | 88.91 | 0.52 | 0.12 |
| 399 | OTHER (PETROLEUM PROD AND MARKETING) | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 |
| 410 | CHEMICAL | 0.45 | 2.10 | 4.67 | 32.61 | 6.70 | 0.30 | 25.74 | 5.70 | 5.32 |
| 420 | FOOD AND AGRICULTURE | 2.45 | 9.04 | 0.97 | 20.40 | 25.13 | 0.07 | 18.94 | 10.83 | 2.76 |
| 430 | MINERAL PROCESSES | 46.85 | 66.40 | 22.76 | 5.38 | 129.41 | 0.09 | 4.37 | 68.18 | 26.79 |
| 440 | METAL PROCESSES | 2.37 | 1.27 | 0.04 | 0.79 | 2.07 | 0.00 | 0.63 | 1.43 | 1.04 |
| 450 | WOOD AND PAPER | 1.69 | 2.68 | 0.16 | 4.88 | 25.25 | 0.00 | 4.05 | 16.21 | 10.55 |
| 460 | GLASS AND RELATED PRODUCTS | 0.25 | 11.28 | 4.68 | 0.63 | 2.28 | 0.01 | 0.44 | 2.05 | 1.86 |
| 470 | ELECTRONICS | 0.00 | 0.01 | 0.00 | 1.34 | 0.13 | 0.00 | 1.08 | 0.06 | 0.04 |
| 499 | OTHER (INDUSTRIAL PROCESSES) | 4.69 | 7.76 | 0.82 | 18.45 | 19.15 | 8.83 | 15.61 | 13.18 | 7.98 |
| 510 | CONSUMER PRODUCTS | 0.00 | 0.00 | 0.00 | 288.67 | 0.00 | 0.00 | 245.85 | 0.00 | 0.00 |
| 520 | ARCHITECTURAL COATINGS AND SOLVENTS | 0.00 | 0.00 | 0.00 | 82.70 | 0.00 | 0.00 | 80.11 | 0.00 | 0.00 |
| 530 | PESTICIDES/FERTILIZERS | 0.00 | 0.00 | 0.00 | 36.39 | 0.00 | 33.13 | 29.90 | 0.00 | 0.00 |
| 540 | ASPHALT PAVING / ROOFING | 0.00 | 0.00 | 0.00 | 22.18 | 0.04 | 0.00 | 21.24 | 0.03 | 0.03 |
| 610 | RESIDENTIAL FUEL COMBUSTION | 1,826.77 | 123.99 | 7.75 | 270.15 | 264.39 | 13.00 | 118.44 | 247.77 | 238.85 |
| 620 | FARMING OPERATIONS | 0.00 | 0.00 | 0.00 | 2,075.76 | 141.54 | 494.54 | 166.06 | 72.23 | 19.63 |
| 630 | CONSTRUCTION AND DEMOLITION | 0.00 | 0.00 | 0.00 | 0.00 | 456.47 | 0.00 | 0.00 | 223.35 | 22.32 |
| 640 | PAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 888.00 | 0.00 | 0.00 | 406.00 | 60.92 |
| 645 | UNPAVED ROAD DUST | 0.00 | 0.00 | 0.00 | 0.00 | 233.93 | 0.00 | 0.00 | 139.03 | 13.90 |
| 650 | FUGITIVE WINDBLOWN DUST | 0.00 | 0.00 | 0.00 | 0.00 | 148.77 | 0.00 | 0.00 | 84.54 | 11.69 |
| 660 | FIRES | 10.98 | 0.27 | 0.00 | 1.11 | 1.29 | 0.00 | 0.78 | 1.27 | 1.19 |
| 670 | WASTE BURNING AND DISPOSAL | 676.02 | 14.27 | 0.78 | 81.07 | 72.77 | 2.83 | 44.13 | 70.78 | 65.23 |
| 690 | COOKING | 0.19 | 0.00 | 0.00 | 10.44 | 42.81 | 0.00 | 7.29 | 29.97 | 17.98 |
| 699 | OTHER (MISCELLANEOUS PROCESSES) | 1.46 | 0.08 | 0.00 | 0.13 | 1.67 | 65.19 | 0.09 | 1.17 | 0.70 |
| 700 | On-Road Motor Vehicles | 4,338.42 | 1,054.04 | 5.07 | 483.52 | 67.57 | 0.00 | 437.49 | 66.68 | 48.02 |
| 710 | LIGHT DUTY PASSENGER (LDA) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 18.15 | 0.00 | 0.00 | 0.00 |
| 722 | LIGHT DUTY TRUCKS - 1 (LDT1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.95 | 0.00 | 0.00 | 0.00 |
| 723 | LIGHT DUTY TRUCKS - 2 (LDT2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.09 | 0.00 | 0.00 | 0.00 |
| 724 | MEDIUM DUTY TRUCKS (MDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.74 | 0.00 | 0.00 | 0.00 |
| 732 | LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 | 0.00 | 0.00 | 0.00 |
| 733 | LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.00 | 0.00 | 0.00 |
| 734 | MEDIUM HEAVY DUTY GAS TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 |
| 736 | HEAVY HEAVY DUTY GAS TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 742 | LT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 743 | LT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 744 | MED HEAVY DUTY DIESEL TRUCKS (MHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 746 | HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 750 | MOTORCYCLES (MCY) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 | 0.00 | 0.00 |
| 760 | HEAVY DUTY DIESEL URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 762 | HEAVY DUTY GAS URBAN BUSES (UB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 770 | SCHOOL BUSES (SB) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 776 | OTHER DIESEL BUSES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 780 | MOTOR HOMES (MH) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 |
| 810 | AIRCRAFT | 313.27 | 77.41 | 4.90 | 46.35 | 9.60 | 0.00 | 41.32 | 9.32 | 9.07 |
| 820 | TRAINS | 38.76 | 123.62 | 0.12 | 13.91 | 4.18 | 0.00 | 11.64 | 4.18 | 3.84 |
| 830 | SHIPS AND COMMERCIAL BOATS | 55.82 | 414.81 | 215.17 | 19.71 | 33.57 | 0.00 | 16.51 | 32.33 | 31.40 |
| 840 | RECREATIONAL BOATS | 123.53 | 6.29 | 0.01 | 30.52 | 2.40 | 0.00 | 29.35 | 2.16 | 1.64 |
| 850 | OFF-ROAD RECREATIONAL VEHICLES | 165.21 | 1.98 | 0.42 | 61.02 | 0.88 | 0.00 | 57.16 | 0.79 | 0.60 |
| 860 | OFF-ROAD EQUIPMENT | 1,376.80 | 387.22 | 0.92 | 145.00 | 21.55 | 0.00 | 128.77 | 21.16 | 19.06 |
| 870 | FARM EQUIPMENT | 75.31 | 54.11 | 0.10 | 11.56 | 3.10 | 0.00 | 9.99 | 3.09 | 2.82 |
| 890 | FUEL STORAGE AND HANDLING | 0.00 | 0.00 | 0.00 | 15.53 | 0.00 | 0.00 | 15.48 | 0.00 | 0.00 |
| 910 | BIOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 14.54 | 578.69 | 0.00 | 0.00 |
| 920 | GEOGENIC SOURCES | 0.00 | 0.00 | 0.00 | 101.75 | 0.00 | 36.22 | 29.50 | 0.00 | 0.00 |

# Table 3.28. Totals for Wednesday, January 11, 2000 by County: Baseline

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 677.66 | 171.98 | 4.22 | 262.03 | 75.53 | 7.02 | 115.42 | 45.37 | 21.22 |
| Alpine | 3.65 | 0.47 | 0.02 | 1.57 | 0.90 | 0.17 | 0.58 | 0.59 | 0.29 |
| Amador | 45.70 | 5.75 | 0.18 | 17.37 | 10.64 | 1.39 | 6.68 | 6.96 | 4.62 |
| Butte | 173.12 | 29.23 | 0.47 | 31.94 | 26.54 | 4.30 | 21.18 | 18.01 | 10.65 |
| Calaveras | 68.48 | 5.67 | 0.08 | 16.72 | 8.50 | 0.89 | 7.90 | 6.78 | 5.21 |
| Colusa | 24.06 | 13.67 | 0.47 | 18.04 | 8.95 | 4.42 | 5.81 | 5.05 | 1.85 |
| Contra Costa | 472.00 | 127.67 | 34.68 | 223.08 | 50.28 | 5.87 | 99.23 | 31.12 | 16.10 |
| Del Norte | 31.03 | 5.93 | 2.06 | 15.46 | 6.33 | 0.72 | 3.73 | 4.48 | 2.74 |
| El Dorado | 176.32 | 14.14 | 0.51 | 39.21 | 25.33 | 1.72 | 20.57 | 18.21 | 12.67 |
| Fresno | 523.09 | 136.81 | 9.07 | 416.82 | 78.57 | 73.05 | 96.80 | 50.48 | 26.64 |
| Glenn | 57.27 | 11.32 | 0.22 | 28.07 | 12.26 | 5.43 | 8.39 | 8.30 | 5.23 |
| Humboldt | 147.10 | 36.68 | 5.63 | 62.75 | 21.86 | 4.78 | 18.81 | 15.67 | 10.24 |
| Imperial | 115.23 | 39.12 | 1.04 | 141.71 | 136.84 | 80.59 | 28.22 | 77.60 | 15.48 |
| Inyo | 33.93 | 5.58 | 1.28 | 9.19 | 1,601.98 | 2.39 | 4.54 | 952.28 | 127.45 |
| Kern | 492.67 | 250.47 | 16.47 | 238.29 | 79.40 | 37.98 | 115.36 | 53.75 | 29.81 |
| Kings | 92.91 | 36.55 | 0.89 | 68.55 | 24.78 | 25.29 | 19.59 | 13.40 | 6.10 |
| Lake | 95.03 | 7.69 | 0.63 | 19.31 | 9.66 | 0.88 | 9.75 | 6.81 | 4.46 |
| Lassen | 70.83 | 8.30 | 0.78 | 21.67 | 12.39 | 2.35 | 7.60 | 9.23 | 6.22 |
| Los Angeles | 3,637.80 | 869.94 | 45.93 | 847.93 | 336.71 | 55.69 | 685.93 | 187.24 | 66.17 |
| Madera | 147.16 | 37.11 | 0.84 | 58.90 | 21.00 | 16.26 | 22.22 | 15.18 | 10.35 |
| Marin | 129.25 | 22.94 | 1.94 | 50.41 | 12.70 | 3.71 | 20.27 | 8.03 | 4.29 |
| Mariposa | 30.71 | 2.28 | 0.04 | 16.01 | 4.64 | 1.93 | 4.59 | 3.35 | 2.16 |
| Mendocino | 107.63 | 25.76 | 5.61 | 32.95 | 20.43 | 2.43 | 12.98 | 14.10 | 8.19 |
| Merced | 197.20 | 59.73 | 1.42 | 139.13 | 30.45 | 45.02 | 35.46 | 18.80 | 9.14 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 26.32 | 5.03 | 0.29 | 23.64 | 6.60 | 2.68 | 4.51 | 4.51 | 2.38 |
| Mono | 33.10 | 3.22 | 0.07 | 6.90 | 18.47 | 1.05 | 3.37 | 11.79 | 3.79 |
| Monterey | 268.22 | 69.77 | 7.30 | 165.36 | 29.02 | 8.68 | 31.38 | 17.53 | 8.43 |
| Napa | 95.49 | 14.75 | 0.11 | 31.04 | 13.11 | 2.29 | 13.95 | 8.02 | 3.99 |
| Nevada | 146.26 | 15.63 | 0.75 | 25.22 | 23.50 | 1.25 | 13.36 | 17.56 | 12.72 |
| Orange | 1,056.60 | 229.67 | 4.25 | 274.36 | 110.84 | 16.95 | 209.41 | 58.90 | 17.60 |
| Placer | 213.70 | 39.99 | 0.68 | 72.37 | 35.01 | 3.02 | 30.10 | 21.73 | 11.74 |
| Plumas | 124.87 | 7.95 | 0.61 | 17.71 | 12.83 | 0.98 | 9.16 | 10.30 | 7.70 |
| Riverside | 721.90 | 210.75 | 2.11 | 215.53 | 132.79 | 25.93 | 125.74 | 72.05 | 19.38 |
| Sacramento | 578.85 | 105.53 | 1.19 | 161.53 | 69.85 | 12.88 | 87.86 | 40.65 | 17.26 |
| San Benito | 34.80 | 12.08 | 0.10 | 35.56 | 7.20 | 3.70 | 5.72 | 4.08 | 1.54 |
| San Bernardino | 869.96 | 327.29 | 7.91 | 301.33 | 191.07 | 32.28 | 153.41 | 113.02 | 39.51 |
| San Diego | 1,411.75 | 283.35 | 11.71 | 628.52 | 176.27 | 21.88 | 217.21 | 99.43 | 35.59 |
| San Francisco | 281.70 | 69.51 | 5.96 | 67.15 | 29.73 | 2.76 | 48.60 | 18.98 | 10.18 |
| San Joaquin | 336.01 | 116.53 | 4.89 | 123.24 | 51.63 | 28.37 | 58.07 | 30.27 | 14.43 |
| San Luis Obispo | 218.23 | 42.37 | 16.01 | 69.11 | 34.93 | 6.27 | 25.84 | 22.60 | 12.16 |
| San Mateo | 359.31 | 87.54 | 11.43 | 110.43 | 34.43 | 3.79 | 55.27 | 21.53 | 11.35 |
| Santa Barbara | 301.20 | 106.96 | 32.98 | 210.78 | 51.13 | 6.53 | 75.47 | 35.84 | 22.02 |
| Santa Clara | 790.80 | 145.36 | 2.46 | 279.70 | 76.12 | 8.76 | 123.65 | 45.20 | 20.26 |
| Santa Cruz | 172.10 | 26.95 | 3.08 | 101.17 | 19.04 | 2.31 | 19.43 | 12.05 | 6.78 |
| Shasta | 214.73 | 40.60 | 1.57 | 41.66 | 31.87 | 3.11 | 22.44 | 23.26 | 15.15 |
| Sierra | 15.26 | 1.17 | 0.18 | 4.28 | 3.45 | 0.37 | 2.12 | 2.21 | 0.90 |
| Siskiyou | 274.71 | 20.42 | 0.86 | 45.24 | 31.70 | 2.60 | 21.35 | 25.53 | 18.79 |
| Solano | 215.82 | 61.07 | 16.72 | 64.43 | 34.54 | 5.34 | 38.96 | 19.40 | 7.87 |
| Sonoma | 304.00 | 48.68 | 2.50 | 116.41 | 36.21 | 11.41 | 46.75 | 23.09 | 12.44 |
| Stanislaus | 258.52 | 66.03 | 3.14 | 235.75 | 38.06 | 62.04 | 53.79 | 23.15 | 11.82 |
| Sutter | 54.61 | 17.39 | 0.16 | 12.87 | 12.97 | 2.74 | 8.17 | 7.46 | 3.12 |
| Tehama | 73.45 | 18.93 | 0.34 | 31.35 | 13.48 | 3.06 | 9.83 | 9.47 | 5.76 |
| Trinity | 30.15 | 3.28 | 0.06 | 7.28 | 9.43 | 0.77 | 3.27 | 6.27 | 2.47 |
| Tulare | 239.38 | 55.31 | 2.59 | 208.43 | 39.93 | 78.41 | 49.74 | 24.15 | 11.80 |
| Tuolumne | 133.35 | 9.57 | 0.58 | 22.58 | 16.98 | 2.43 | 12.62 | 13.01 | 9.87 |
| Ventura | 388.46 | 82.45 | 6.86 | 89.73 | 45.24 | 8.32 | 66.60 | 29.10 | 16.15 |
| Yolo | 96.23 | 29.12 | 0.69 | 30.98 | 47.95 | 3.37 | 15.35 | 24.19 | 5.79 |
| Yuba | 49.99 | 9.15 | 0.36 | 16.39 | 7.75 | 2.40 | 7.28 | 4.93 | 2.69 |

# Table 3.29. Totals for Wednesday, January 11, 2000 by County: Adjustment 1

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 677.66 | 171.98 | 4.22 | 262.03 | 75.53 | 7.02 | 115.42 | 45.37 | 21.22 |
| Alpine | 3.65 | 0.47 | 0.02 | 1.57 | 0.90 | 0.17 | 0.58 | 0.59 | 0.29 |
| Amador | 45.70 | 5.75 | 0.18 | 17.37 | 10.64 | 1.39 | 6.68 | 6.96 | 4.62 |
| Butte | 173.12 | 31.25 | 0.47 | 34.41 | 26.53 | 4.30 | 22.46 | 18.00 | 10.65 |
| Calaveras | 68.48 | 5.67 | 0.08 | 16.72 | 8.50 | 0.89 | 7.90 | 6.78 | 5.21 |
| Colusa | 24.06 | 13.67 | 0.47 | 18.04 | 8.94 | 4.42 | 5.81 | 5.05 | 1.85 |
| Contra Costa | 472.00 | 127.67 | 34.68 | 223.08 | 50.28 | 5.87 | 99.23 | 31.12 | 16.10 |
| Del Norte | 31.03 | 5.93 | 2.06 | 15.46 | 6.33 | 0.72 | 3.73 | 4.48 | 2.74 |
| El Dorado | 176.32 | 14.14 | 0.51 | 39.21 | 25.33 | 1.72 | 20.57 | 18.20 | 12.66 |
| Fresno | 523.09 | 136.81 | 9.07 | 514.16 | 75.81 | 73.05 | 104.59 | 49.21 | 26.45 |
| Glenn | 57.27 | 11.32 | 0.22 | 28.07 | 12.26 | 5.43 | 8.39 | 8.30 | 5.23 |
| Humboldt | 147.10 | 36.68 | 5.63 | 62.75 | 21.85 | 4.78 | 18.81 | 15.67 | 10.24 |
| Imperial | 115.23 | 39.12 | 1.04 | 141.71 | 136.84 | 80.59 | 28.22 | 77.60 | 15.48 |
| Inyo | 33.93 | 5.58 | 1.28 | 9.19 | 1,601.98 | 2.39 | 4.54 | 952.27 | 127.44 |
| Kern | 492.67 | 250.47 | 16.47 | 284.19 | 75.21 | 37.98 | 119.03 | 51.83 | 29.51 |
| Kings | 92.91 | 36.55 | 0.89 | 131.57 | 24.26 | 25.29 | 24.63 | 13.16 | 6.07 |
| Lake | 95.03 | 7.69 | 0.63 | 19.31 | 9.66 | 0.88 | 9.75 | 6.81 | 4.46 |
| Lassen | 70.83 | 8.30 | 0.78 | 21.67 | 12.39 | 2.35 | 7.60 | 9.23 | 6.21 |
| Los Angeles | 3,637.80 | 869.94 | 45.93 | 847.93 | 336.70 | 55.69 | 685.93 | 187.24 | 66.16 |
| Madera | 147.16 | 37.11 | 0.84 | 86.42 | 20.66 | 16.26 | 24.42 | 15.03 | 10.33 |
| Marin | 129.25 | 22.94 | 1.94 | 50.41 | 12.70 | 3.71 | 20.27 | 8.02 | 4.29 |
| Mariposa | 30.71 | 2.28 | 0.04 | 16.01 | 4.64 | 1.93 | 4.59 | 3.35 | 2.16 |
| Mendocino | 107.63 | 25.76 | 5.61 | 32.95 | 20.43 | 2.43 | 12.98 | 14.09 | 8.19 |
| Merced | 197.20 | 59.73 | 1.42 | 256.96 | 29.08 | 45.02 | 44.89 | 18.17 | 9.05 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 26.32 | 5.03 | 0.29 | 23.64 | 6.60 | 2.68 | 4.51 | 4.51 | 2.37 |
| Mono | 33.10 | 3.22 | 0.07 | 6.90 | 18.47 | 1.05 | 3.37 | 11.79 | 3.79 |
| Monterey | 268.22 | 69.77 | 7.30 | 165.36 | 29.01 | 8.68 | 31.38 | 17.52 | 8.43 |
| Napa | 95.49 | 14.75 | 0.11 | 31.04 | 13.11 | 2.29 | 13.95 | 8.02 | 3.99 |
| Nevada | 146.26 | 15.63 | 0.75 | 25.22 | 23.50 | 1.25 | 13.36 | 17.56 | 12.72 |
| Orange | 1,056.60 | 229.67 | 4.25 | 274.36 | 110.84 | 16.95 | 209.41 | 58.90 | 17.60 |
| Placer | 213.70 | 39.99 | 0.68 | 72.37 | 35.01 | 3.02 | 30.10 | 21.73 | 11.74 |
| Plumas | 124.87 | 7.95 | 0.61 | 17.71 | 12.83 | 0.98 | 9.16 | 10.29 | 7.70 |
| Riverside | 721.90 | 210.75 | 2.11 | 215.53 | 132.78 | 25.93 | 125.74 | 72.04 | 19.36 |
| Sacramento | 578.85 | 106.71 | 1.19 | 171.33 | 69.85 | 12.88 | 90.92 | 40.64 | 17.26 |
| San Benito | 34.80 | 12.08 | 0.10 | 35.56 | 7.20 | 3.70 | 5.72 | 4.07 | 1.54 |
| San Bernardino | 869.96 | 327.29 | 7.91 | 301.33 | 191.04 | 32.28 | 153.41 | 112.99 | 39.49 |
| San Diego | 1,411.75 | 283.35 | 11.71 | 628.52 | 176.26 | 21.88 | 217.21 | 99.43 | 35.59 |
| San Francisco | 281.70 | 69.51 | 5.96 | 67.15 | 29.73 | 2.76 | 48.60 | 18.98 | 10.18 |
| San Joaquin | 336.01 | 116.53 | 4.89 | 182.02 | 50.39 | 28.37 | 62.77 | 29.70 | 14.35 |
| San Luis Obispo | 218.23 | 42.37 | 16.01 | 69.11 | 34.92 | 6.27 | 25.84 | 22.60 | 12.16 |
| San Mateo | 359.31 | 87.54 | 11.43 | 110.43 | 34.43 | 3.79 | 55.27 | 21.53 | 11.35 |
| Santa Barbara | 301.20 | 106.96 | 32.98 | 210.78 | 51.12 | 6.53 | 75.47 | 35.84 | 22.02 |
| Santa Clara | 790.80 | 145.36 | 2.46 | 279.70 | 76.12 | 8.76 | 123.65 | 45.20 | 20.26 |
| Santa Cruz | 172.10 | 26.95 | 3.08 | 101.17 | 19.03 | 2.31 | 19.43 | 12.05 | 6.78 |
| Shasta | 214.73 | 40.60 | 1.57 | 41.66 | 31.86 | 3.11 | 22.44 | 23.25 | 15.14 |
| Sierra | 15.26 | 1.17 | 0.18 | 4.28 | 3.45 | 0.37 | 2.12 | 2.21 | 0.90 |
| Siskiyou | 274.71 | 20.42 | 0.86 | 45.24 | 31.70 | 2.60 | 21.35 | 25.53 | 18.79 |
| Solano | 215.82 | 61.07 | 16.72 | 64.43 | 34.54 | 5.34 | 38.96 | 19.40 | 7.86 |
| Sonoma | 304.00 | 48.68 | 2.50 | 116.41 | 36.21 | 11.41 | 46.75 | 23.08 | 12.44 |
| Stanislaus | 258.52 | 66.03 | 3.14 | 344.75 | 37.13 | 62.04 | 62.51 | 22.72 | 11.76 |
| Sutter | 54.61 | 17.39 | 0.16 | 12.87 | 12.97 | 2.74 | 8.17 | 7.46 | 3.12 |
| Tehama | 73.45 | 18.93 | 0.34 | 31.35 | 13.48 | 3.06 | 9.83 | 9.47 | 5.76 |
| Trinity | 30.15 | 3.28 | 0.06 | 7.28 | 9.42 | 0.77 | 3.27 | 6.27 | 2.46 |
| Tulare | 239.38 | 55.31 | 2.59 | 411.83 | 39.15 | 78.41 | 66.01 | 23.79 | 11.74 |
| Tuolumne | 133.35 | 9.57 | 0.58 | 22.58 | 16.98 | 2.43 | 12.62 | 13.01 | 9.87 |
| Ventura | 388.46 | 82.45 | 6.86 | 89.73 | 45.24 | 8.32 | 66.60 | 29.10 | 16.15 |
| Yolo | 96.23 | 29.51 | 0.69 | 32.99 | 47.95 | 3.37 | 15.91 | 24.19 | 5.79 |
| Yuba | 49.99 | 9.15 | 0.36 | 16.39 | 7.75 | 2.40 | 7.28 | 4.93 | 2.69 |

# Table 3.30. Totals for Wednesday, January 11, 2000 by County: Adjustment 2

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 677.66 | 171.98 | 4.22 | 262.03 | 75.53 | 7.02 | 115.42 | 45.37 | 21.22 |
| Alpine | 3.65 | 0.47 | 0.02 | 1.57 | 0.90 | 0.17 | 0.58 | 0.59 | 0.29 |
| Amador | 45.70 | 5.75 | 0.18 | 17.37 | 10.64 | 1.39 | 6.68 | 6.96 | 4.62 |
| Butte | 173.12 | 31.25 | 0.47 | 34.41 | 26.53 | 4.30 | 22.46 | 18.00 | 10.65 |
| Calaveras | 68.48 | 5.67 | 0.08 | 16.72 | 8.50 | 0.89 | 7.90 | 6.78 | 5.21 |
| Colusa | 24.06 | 13.67 | 0.47 | 18.04 | 8.94 | 4.42 | 5.81 | 5.05 | 1.85 |
| Contra Costa | 472.00 | 127.67 | 34.68 | 223.08 | 50.28 | 5.87 | 99.23 | 31.12 | 16.10 |
| Del Norte | 31.03 | 5.93 | 2.06 | 15.46 | 6.33 | 0.72 | 3.73 | 4.48 | 2.74 |
| El Dorado | 176.32 | 14.14 | 0.51 | 39.21 | 25.33 | 1.72 | 20.57 | 18.20 | 12.66 |
| Fresno | 523.09 | 136.43 | 9.07 | 491.24 | 75.17 | 67.19 | 102.75 | 48.88 | 26.36 |
| Glenn | 57.27 | 11.32 | 0.22 | 28.07 | 12.26 | 5.43 | 8.39 | 8.30 | 5.23 |
| Humboldt | 147.10 | 36.68 | 5.63 | 62.75 | 21.85 | 4.78 | 18.81 | 15.67 | 10.24 |
| Imperial | 115.23 | 39.12 | 1.04 | 141.71 | 136.84 | 80.59 | 28.22 | 77.60 | 15.48 |
| Inyo | 33.93 | 5.58 | 1.28 | 9.19 | 1,601.98 | 2.39 | 4.54 | 952.27 | 127.44 |
| Kern | 492.67 | 247.28 | 16.47 | 273.83 | 75.78 | 35.63 | 118.20 | 52.25 | 29.79 |
| Kings | 92.91 | 31.39 | 0.89 | 119.69 | 24.21 | 23.26 | 23.68 | 13.15 | 6.08 |
| Lake | 95.03 | 7.69 | 0.63 | 19.31 | 9.66 | 0.88 | 9.75 | 6.81 | 4.46 |
| Lassen | 70.83 | 8.30 | 0.78 | 21.67 | 12.39 | 2.35 | 7.60 | 9.23 | 6.21 |
| Los Angeles | 3,637.80 | 869.94 | 45.93 | 847.93 | 336.70 | 55.69 | 685.93 | 187.24 | 66.16 |
| Madera | 147.16 | 37.11 | 0.84 | 79.61 | 20.62 | 14.73 | 23.88 | 15.03 | 10.36 |
| Marin | 129.25 | 22.94 | 1.94 | 50.41 | 12.70 | 3.71 | 20.27 | 8.02 | 4.29 |
| Mariposa | 30.71 | 2.28 | 0.04 | 16.01 | 4.64 | 1.93 | 4.59 | 3.35 | 2.16 |
| Mendocino | 107.63 | 25.76 | 5.61 | 32.95 | 20.43 | 2.43 | 12.98 | 14.09 | 8.19 |
| Merced | 197.20 | 58.76 | 1.42 | 218.31 | 28.90 | 38.43 | 41.80 | 18.11 | 9.08 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 26.32 | 5.03 | 0.29 | 23.64 | 6.60 | 2.68 | 4.51 | 4.51 | 2.37 |
| Mono | 33.10 | 3.22 | 0.07 | 6.90 | 18.47 | 1.05 | 3.37 | 11.79 | 3.79 |
| Monterey | 268.22 | 69.77 | 7.30 | 165.36 | 29.01 | 8.68 | 31.38 | 17.52 | 8.43 |
| Napa | 95.49 | 14.75 | 0.11 | 31.04 | 13.11 | 2.29 | 13.95 | 8.02 | 3.99 |
| Nevada | 146.26 | 15.63 | 0.75 | 25.22 | 23.50 | 1.25 | 13.36 | 17.56 | 12.72 |
| Orange | 1,056.60 | 229.67 | 4.25 | 274.36 | 110.84 | 16.95 | 209.41 | 58.90 | 17.60 |
| Placer | 213.70 | 39.99 | 0.68 | 72.37 | 35.01 | 3.02 | 30.10 | 21.73 | 11.74 |
| Plumas | 124.87 | 7.95 | 0.61 | 17.71 | 12.83 | 0.98 | 9.16 | 10.29 | 7.70 |
| Riverside | 721.90 | 210.75 | 2.11 | 215.53 | 132.78 | 25.93 | 125.74 | 72.04 | 19.36 |
| Sacramento | 578.85 | 106.71 | 1.19 | 171.33 | 69.85 | 12.88 | 90.92 | 40.64 | 17.26 |
| San Benito | 34.80 | 12.08 | 0.10 | 35.56 | 7.20 | 3.70 | 5.72 | 4.07 | 1.54 |
| San Bernardino | 869.96 | 327.29 | 7.91 | 301.33 | 191.04 | 32.28 | 153.41 | 112.99 | 39.49 |
| San Diego | 1,411.75 | 283.35 | 11.71 | 628.52 | 176.26 | 21.88 | 217.21 | 99.43 | 35.59 |
| San Francisco | 281.70 | 69.51 | 5.96 | 67.15 | 29.73 | 2.76 | 48.60 | 18.98 | 10.18 |
| San Joaquin | 336.01 | 113.42 | 4.89 | 162.74 | 50.71 | 25.08 | 61.23 | 29.95 | 14.53 |
| San Luis Obispo | 218.23 | 42.37 | 16.01 | 69.11 | 34.92 | 6.27 | 25.84 | 22.60 | 12.16 |
| San Mateo | 359.31 | 87.54 | 11.43 | 110.43 | 34.43 | 3.79 | 55.27 | 21.53 | 11.35 |
| Santa Barbara | 301.20 | 106.96 | 32.98 | 210.78 | 51.12 | 6.53 | 75.47 | 35.84 | 22.02 |
| Santa Clara | 790.80 | 145.36 | 2.46 | 279.70 | 76.12 | 8.76 | 123.65 | 45.20 | 20.26 |
| Santa Cruz | 172.10 | 26.95 | 3.08 | 101.17 | 19.03 | 2.31 | 19.43 | 12.05 | 6.78 |
| Shasta | 214.73 | 40.60 | 1.57 | 41.66 | 31.86 | 3.11 | 22.44 | 23.25 | 15.14 |
| Sierra | 15.26 | 1.17 | 0.18 | 4.28 | 3.45 | 0.37 | 2.12 | 2.21 | 0.90 |
| Siskiyou | 274.71 | 20.42 | 0.86 | 45.24 | 31.70 | 2.60 | 21.35 | 25.53 | 18.79 |
| Solano | 215.82 | 61.07 | 16.72 | 64.43 | 34.54 | 5.34 | 38.96 | 19.40 | 7.86 |
| Sonoma | 304.00 | 48.68 | 2.50 | 116.41 | 36.21 | 11.41 | 46.75 | 23.08 | 12.44 |
| Stanislaus | 258.52 | 61.30 | 3.14 | 313.84 | 37.01 | 55.22 | 60.03 | 22.75 | 11.89 |
| Sutter | 54.61 | 17.39 | 0.16 | 12.87 | 12.97 | 2.74 | 8.17 | 7.46 | 3.12 |
| Tehama | 73.45 | 18.93 | 0.34 | 31.35 | 13.48 | 3.06 | 9.83 | 9.47 | 5.76 |
| Trinity | 30.15 | 3.28 | 0.06 | 7.28 | 9.42 | 0.77 | 3.27 | 6.27 | 2.46 |
| Tulare | 239.38 | 55.12 | 2.59 | 363.75 | 38.80 | 68.94 | 62.16 | 23.68 | 11.82 |
| Tuolumne | 133.35 | 9.57 | 0.58 | 22.58 | 16.98 | 2.43 | 12.62 | 13.01 | 9.87 |
| Ventura | 388.46 | 82.45 | 6.86 | 89.73 | 45.24 | 8.32 | 66.60 | 29.10 | 16.15 |
| Yolo | 96.23 | 29.51 | 0.69 | 32.99 | 47.95 | 3.37 | 15.91 | 24.19 | 5.79 |
| Yuba | 49.99 | 9.15 | 0.36 | 16.39 | 7.75 | 2.40 | 7.28 | 4.93 | 2.69 |

# Table 3.31. Totals for Wednesday, January 11, 2005 by County: Baseline

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 474.94 | 156.12 | 4.94 | 212.45 | 74.94 | 6.42 | 87.68 | 45.08 | 21.27 |
| Alpine | 3.50 | 0.60 | 0.02 | 1.63 | 1.00 | 0.17 | 0.62 | 0.65 | 0.32 |
| Amador | 40.33 | 5.55 | 0.19 | 17.18 | 11.30 | 1.39 | 6.45 | 7.32 | 4.76 |
| Butte | 140.95 | 28.42 | 0.49 | 29.02 | 27.83 | 4.28 | 18.40 | 18.38 | 10.43 |
| Calaveras | 61.22 | 5.72 | 0.10 | 16.16 | 9.01 | 0.89 | 7.39 | 7.00 | 5.24 |
| Colusa | 20.88 | 14.66 | 0.39 | 18.27 | 9.38 | 4.42 | 5.77 | 5.22 | 1.84 |
| Contra Costa | 330.40 | 99.25 | 35.44 | 207.95 | 50.53 | 5.55 | 70.90 | 31.30 | 16.34 |
| Del Norte | 26.94 | 6.43 | 2.68 | 15.89 | 6.66 | 0.72 | 3.25 | 4.68 | 2.81 |
| El Dorado | 150.36 | 12.37 | 0.50 | 37.76 | 27.46 | 1.74 | 18.73 | 19.45 | 13.23 |
| Fresno | 417.55 | 133.85 | 10.19 | 436.98 | 80.82 | 77.64 | 89.10 | 51.60 | 26.89 |
| Glenn | 52.22 | 11.54 | 0.22 | 28.19 | 12.41 | 5.43 | 8.27 | 8.34 | 5.19 |
| Humboldt | 124.84 | 35.24 | 6.80 | 62.57 | 22.32 | 4.73 | 16.81 | 15.91 | 10.29 |
| Imperial | 96.38 | 41.11 | 0.84 | 140.83 | 138.56 | 80.57 | 27.55 | 78.45 | 15.10 |
| Inyo | 30.10 | 6.04 | 0.69 | 9.32 | 252.12 | 2.38 | 4.69 | 149.99 | 21.28 |
| Kern | 412.66 | 260.34 | 10.05 | 235.97 | 75.68 | 41.34 | 100.33 | 50.71 | 27.61 |
| Kings | 84.44 | 36.76 | 0.99 | 75.52 | 20.55 | 28.11 | 20.05 | 12.72 | 6.45 |
| Lake | 84.20 | 7.17 | 0.62 | 18.96 | 9.77 | 0.87 | 9.25 | 6.78 | 4.32 |
| Lassen | 61.28 | 7.24 | 0.69 | 20.86 | 11.90 | 2.33 | 7.10 | 8.68 | 5.64 |
| Los Angeles | 2,589.07 | 760.92 | 54.02 | 570.16 | 301.44 | 53.31 | 453.65 | 169.25 | 65.38 |
| Madera | 128.18 | 38.61 | 1.00 | 62.93 | 21.76 | 17.50 | 23.36 | 15.43 | 10.25 |
| Marin | 88.40 | 19.70 | 2.33 | 47.53 | 13.47 | 3.59 | 15.23 | 8.49 | 4.53 |
| Mariposa | 27.03 | 2.09 | 0.04 | 15.79 | 4.74 | 1.92 | 4.42 | 3.39 | 2.13 |
| Mendocino | 92.01 | 27.28 | 6.56 | 29.31 | 20.83 | 2.41 | 11.61 | 14.33 | 8.22 |
| Merced | 162.07 | 67.76 | 1.43 | 145.00 | 29.12 | 50.50 | 31.56 | 18.14 | 8.96 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 22.93 | 4.23 | 0.25 | 23.16 | 6.49 | 2.68 | 4.14 | 4.39 | 2.25 |
| Mono | 30.42 | 3.70 | 0.08 | 6.84 | 18.83 | 1.05 | 3.33 | 11.96 | 3.79 |
| Monterey | 198.46 | 62.67 | 9.16 | 170.44 | 30.70 | 8.73 | 27.26 | 18.26 | 8.38 |
| Napa | 66.73 | 12.71 | 0.12 | 30.98 | 13.14 | 2.27 | 10.58 | 8.12 | 4.04 |
| Nevada | 130.44 | 16.79 | 0.79 | 24.51 | 24.54 | 1.23 | 12.66 | 18.08 | 12.82 |
| Orange | 740.44 | 190.44 | 5.08 | 188.26 | 95.53 | 16.10 | 135.18 | 52.12 | 16.96 |
| Placer | 182.95 | 41.84 | 0.71 | 72.44 | 37.07 | 3.21 | 28.00 | 23.43 | 12.48 |
| Plumas | 119.51 | 7.23 | 0.59 | 16.73 | 12.62 | 0.97 | 8.71 | 10.07 | 7.42 |
| Riverside | 577.86 | 229.92 | 2.36 | 170.03 | 124.46 | 21.93 | 98.79 | 68.42 | 19.52 |
| Sacramento | 423.30 | 93.55 | 1.14 | 150.31 | 74.98 | 12.82 | 70.27 | 43.50 | 18.29 |
| San Benito | 28.72 | 14.64 | 0.13 | 36.96 | 8.05 | 3.76 | 5.55 | 4.53 | 1.68 |
| San Bernardino | 712.37 | 338.63 | 7.84 | 261.83 | 214.12 | 28.13 | 126.62 | 125.65 | 42.98 |
| San Diego | 1,002.92 | 239.64 | 13.80 | 574.30 | 191.91 | 21.50 | 175.45 | 107.76 | 37.52 |
| San Francisco | 197.37 | 57.80 | 6.64 | 55.44 | 26.90 | 2.51 | 36.83 | 17.65 | 10.17 |
| San Joaquin | 254.70 | 112.08 | 5.28 | 117.95 | 48.15 | 31.50 | 48.52 | 28.61 | 13.82 |
| San Luis Obispo | 179.42 | 37.99 | 21.30 | 59.57 | 36.40 | 6.40 | 23.37 | 23.23 | 12.21 |
| San Mateo | 246.70 | 78.91 | 14.19 | 105.96 | 33.44 | 3.23 | 41.22 | 20.94 | 11.13 |
| Santa Barbara | 250.84 | 112.04 | 41.35 | 206.93 | 53.15 | 6.48 | 70.18 | 37.43 | 23.15 |
| Santa Clara | 545.80 | 120.80 | 2.69 | 256.82 | 75.32 | 7.89 | 90.59 | 45.01 | 20.75 |
| Santa Cruz | 136.35 | 24.89 | 4.82 | 107.36 | 20.37 | 2.27 | 15.87 | 12.61 | 6.93 |
| Shasta | 194.74 | 43.08 | 0.86 | 39.55 | 43.88 | 3.13 | 20.46 | 34.63 | 25.95 |
| Sierra | 13.26 | 1.20 | 0.19 | 4.54 | 3.31 | 0.37 | 2.42 | 2.14 | 0.84 |
| Siskiyou | 260.85 | 22.98 | 0.80 | 43.93 | 31.94 | 2.58 | 20.25 | 25.55 | 18.64 |
| Solano | 162.05 | 56.29 | 19.92 | 60.53 | 34.21 | 5.27 | 30.90 | 19.23 | 7.78 |
| Sonoma | 218.90 | 41.65 | 3.04 | 106.75 | 35.69 | 11.29 | 36.46 | 22.81 | 12.39 |
| Stanislaus | 199.21 | 66.87 | 2.31 | 241.15 | 36.42 | 67.10 | 46.52 | 22.69 | 11.74 |
| Sutter | 44.63 | 18.38 | 0.27 | 11.88 | 13.74 | 2.69 | 7.06 | 7.88 | 3.32 |
| Tehama | 64.27 | 21.62 | 0.33 | 30.41 | 13.96 | 3.06 | 9.27 | 9.76 | 5.83 |
| Trinity | 25.72 | 3.73 | 0.06 | 6.94 | 9.03 | 0.76 | 2.93 | 5.98 | 2.34 |
| Tulare | 184.08 | 53.50 | 0.96 | 221.43 | 38.21 | 87.51 | 45.34 | 23.53 | 11.49 |
| Tuolumne | 121.52 | 8.82 | 0.55 | 22.01 | 17.66 | 2.41 | 12.20 | 12.76 | 9.64 |
| Ventura | 298.15 | 75.71 | 8.54 | 87.76 | 46.98 | 8.29 | 55.37 | 30.11 | 16.55 |
| Yolo | 71.81 | 27.38 | 0.77 | 33.09 | 48.19 | 3.35 | 13.49 | 24.24 | 5.77 |
| Yuba | 42.70 | 7.69 | 0.27 | 15.88 | 8.13 | 2.42 | 6.80 | 5.08 | 2.67 |

# Table 3.32. Totals for Wednesday, January 11, 2005 by County: Adjustment 1

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 473.00 | 147.49 | 4.87 | 211.95 | 74.61 | 6.42 | 87.26 | 44.76 | 20.98 |
| Alpine | 3.48 | 0.51 | 0.02 | 1.62 | 1.00 | 0.17 | 0.62 | 0.65 | 0.31 |
| Amador | 40.31 | 5.40 | 0.19 | 17.17 | 11.29 | 1.39 | 6.44 | 7.32 | 4.75 |
| Butte | 140.52 | 28.52 | 0.47 | 31.43 | 27.76 | 4.28 | 19.57 | 18.31 | 10.36 |
| Calaveras | 61.18 | 5.47 | 0.09 | 16.15 | 9.01 | 0.89 | 7.38 | 6.99 | 5.23 |
| Colusa | 20.67 | 13.79 | 0.38 | 18.21 | 9.35 | 4.42 | 5.72 | 5.18 | 1.81 |
| Contra Costa | 329.72 | 96.09 | 35.42 | 207.78 | 50.41 | 5.55 | 70.75 | 31.19 | 16.24 |
| Del Norte | 26.93 | 6.36 | 2.68 | 15.89 | 6.66 | 0.72 | 3.25 | 4.68 | 2.81 |
| El Dorado | 150.30 | 11.97 | 0.50 | 37.74 | 27.45 | 1.74 | 18.72 | 19.44 | 13.22 |
| Fresno | 414.54 | 121.60 | 10.10 | 541.51 | 77.37 | 77.64 | 95.17 | 49.74 | 26.24 |
| Glenn | 52.04 | 10.81 | 0.21 | 28.14 | 12.38 | 5.43 | 8.23 | 8.31 | 5.17 |
| Humboldt | 124.62 | 34.23 | 6.79 | 62.51 | 22.28 | 4.73 | 16.76 | 15.87 | 10.25 |
| Imperial | 95.34 | 37.14 | 0.81 | 140.55 | 138.39 | 80.57 | 27.32 | 78.28 | 14.94 |
| Inyo | 29.95 | 5.43 | 0.69 | 9.28 | 252.09 | 2.38 | 4.65 | 149.97 | 21.26 |
| Kern | 405.29 | 232.35 | 9.85 | 283.16 | 69.92 | 41.34 | 101.46 | 47.41 | 26.20 |
| Kings | 83.71 | 32.39 | 0.96 | 144.54 | 19.18 | 28.11 | 25.05 | 11.97 | 6.17 |
| Lake | 84.17 | 6.97 | 0.61 | 18.95 | 9.77 | 0.87 | 9.24 | 6.77 | 4.31 |
| Lassen | 61.27 | 7.13 | 0.68 | 20.86 | 11.90 | 2.33 | 7.10 | 8.68 | 5.64 |
| Los Angeles | 2,578.33 | 717.89 | 53.74 | 567.22 | 299.58 | 53.31 | 451.19 | 167.39 | 63.69 |
| Madera | 127.46 | 35.95 | 0.98 | 92.99 | 21.16 | 17.50 | 25.47 | 15.10 | 10.12 |
| Marin | 88.30 | 19.15 | 2.33 | 47.50 | 13.45 | 3.59 | 15.21 | 8.47 | 4.52 |
| Mariposa | 27.02 | 2.05 | 0.04 | 15.79 | 4.73 | 1.92 | 4.42 | 3.38 | 2.13 |
| Mendocino | 91.70 | 25.95 | 6.55 | 29.23 | 20.77 | 2.41 | 11.54 | 14.28 | 8.17 |
| Merced | 159.61 | 59.26 | 1.37 | 274.43 | 26.65 | 50.50 | 41.15 | 16.80 | 8.47 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 22.92 | 4.18 | 0.25 | 23.16 | 6.49 | 2.68 | 4.14 | 4.38 | 2.25 |
| Mono | 30.33 | 3.28 | 0.07 | 6.81 | 18.81 | 1.05 | 3.31 | 11.94 | 3.78 |
| Monterey | 197.82 | 60.16 | 9.14 | 170.29 | 30.60 | 8.73 | 27.13 | 18.16 | 8.28 |
| Napa | 66.59 | 12.05 | 0.11 | 30.94 | 13.12 | 2.27 | 10.55 | 8.10 | 4.02 |
| Nevada | 130.07 | 15.19 | 0.78 | 24.41 | 24.48 | 1.23 | 12.58 | 18.02 | 12.77 |
| Orange | 738.82 | 181.69 | 5.02 | 187.85 | 95.24 | 16.10 | 134.84 | 51.83 | 16.70 |
| Placer | 182.15 | 38.43 | 0.69 | 72.22 | 36.94 | 3.21 | 27.82 | 23.31 | 12.37 |
| Plumas | 119.50 | 7.13 | 0.59 | 16.72 | 12.62 | 0.97 | 8.70 | 10.06 | 7.42 |
| Riverside | 572.65 | 204.67 | 2.20 | 168.41 | 123.41 | 21.93 | 97.43 | 67.38 | 18.56 |
| Sacramento | 422.12 | 89.32 | 1.10 | 161.39 | 74.78 | 12.82 | 73.20 | 43.31 | 18.12 |
| San Benito | 28.18 | 12.52 | 0.11 | 36.81 | 7.96 | 3.76 | 5.43 | 4.44 | 1.60 |
| San Bernardino | 706.20 | 308.42 | 7.65 | 259.87 | 212.82 | 28.13 | 124.98 | 124.34 | 41.78 |
| San Diego | 1,000.13 | 227.64 | 13.71 | 573.61 | 191.45 | 21.50 | 174.87 | 107.30 | 37.10 |
| San Francisco | 197.19 | 56.66 | 6.63 | 55.41 | 26.87 | 2.51 | 36.80 | 17.61 | 10.14 |
| San Joaquin | 252.81 | 104.36 | 5.23 | 182.16 | 45.15 | 31.50 | 53.08 | 27.07 | 13.35 |
| San Luis Obispo | 179.20 | 36.91 | 21.29 | 59.51 | 36.35 | 6.40 | 23.33 | 23.19 | 12.17 |
| San Mateo | 246.49 | 77.67 | 14.18 | 105.92 | 33.40 | 3.23 | 41.19 | 20.90 | 11.09 |
| Santa Barbara | 250.56 | 110.68 | 41.34 | 206.87 | 53.10 | 6.48 | 70.13 | 37.38 | 23.10 |
| Santa Clara | 544.79 | 115.96 | 2.66 | 256.57 | 75.15 | 7.89 | 90.38 | 44.84 | 20.60 |
| Santa Cruz | 136.26 | 24.35 | 4.81 | 107.34 | 20.35 | 2.27 | 15.86 | 12.59 | 6.92 |
| Shasta | 193.89 | 39.48 | 0.84 | 39.32 | 43.73 | 3.13 | 20.26 | 34.48 | 25.82 |
| Sierra | 13.25 | 1.17 | 0.19 | 4.54 | 3.31 | 0.37 | 2.42 | 2.14 | 0.84 |
| Siskiyou | 260.18 | 20.22 | 0.78 | 43.74 | 31.82 | 2.58 | 20.09 | 25.44 | 18.53 |
| Solano | 160.76 | 52.05 | 19.89 | 60.18 | 34.01 | 5.27 | 30.61 | 19.03 | 7.60 |
| Sonoma | 218.61 | 40.12 | 3.03 | 106.68 | 35.64 | 11.29 | 36.41 | 22.76 | 12.34 |
| Stanislaus | 197.99 | 61.48 | 2.28 | 361.10 | 34.59 | 67.10 | 55.70 | 21.73 | 11.45 |
| Sutter | 44.27 | 16.82 | 0.26 | 11.79 | 13.68 | 2.69 | 6.98 | 7.82 | 3.27 |
| Tehama | 63.65 | 19.06 | 0.31 | 30.23 | 13.85 | 3.06 | 9.13 | 9.66 | 5.74 |
| Trinity | 25.61 | 3.30 | 0.06 | 6.91 | 9.01 | 0.76 | 2.90 | 5.96 | 2.32 |
| Tulare | 183.11 | 49.19 | 0.93 | 445.58 | 36.48 | 87.51 | 62.73 | 22.62 | 11.23 |
| Tuolumne | 121.50 | 8.66 | 0.55 | 22.00 | 17.65 | 2.41 | 12.19 | 12.75 | 9.64 |
| Ventura | 297.63 | 72.88 | 8.52 | 87.62 | 46.88 | 8.29 | 55.26 | 30.01 | 16.46 |
| Yolo | 71.32 | 25.72 | 0.75 | 35.66 | 48.11 | 3.35 | 14.06 | 24.16 | 5.69 |
| Yuba | 42.66 | 7.49 | 0.27 | 15.87 | 8.13 | 2.42 | 6.80 | 5.07 | 2.66 |

# Table 3.33. Totals for Wednesday, January 11, 2005 by County: Adjustment 2

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 473.00 | 147.49 | 4.87 | 211.95 | 74.61 | 6.42 | 87.26 | 44.76 | 20.98 |
| Alpine | 3.48 | 0.51 | 0.02 | 1.62 | 1.00 | 0.17 | 0.62 | 0.65 | 0.31 |
| Amador | 40.31 | 5.40 | 0.19 | 17.17 | 11.29 | 1.39 | 6.44 | 7.32 | 4.75 |
| Butte | 140.52 | 28.52 | 0.47 | 31.43 | 27.76 | 4.28 | 19.57 | 18.31 | 10.36 |
| Calaveras | 61.18 | 5.47 | 0.09 | 16.15 | 9.01 | 0.89 | 7.38 | 6.99 | 5.23 |
| Colusa | 20.67 | 13.79 | 0.38 | 18.21 | 9.35 | 4.42 | 5.72 | 5.18 | 1.81 |
| Contra Costa | 329.72 | 96.09 | 35.42 | 207.78 | 50.41 | 5.55 | 70.75 | 31.19 | 16.24 |
| Del Norte | 26.93 | 6.36 | 2.68 | 15.89 | 6.66 | 0.72 | 3.25 | 4.68 | 2.81 |
| El Dorado | 150.30 | 11.97 | 0.50 | 37.74 | 27.45 | 1.74 | 18.72 | 19.44 | 13.22 |
| Fresno | 385.48 | 118.78 | 10.05 | 511.21 | 72.96 | 70.77 | 90.37 | 45.73 | 22.72 |
| Glenn | 52.04 | 10.81 | 0.21 | 28.14 | 12.38 | 5.43 | 8.23 | 8.31 | 5.17 |
| Humboldt | 124.62 | 34.23 | 6.79 | 62.51 | 22.28 | 4.73 | 16.76 | 15.87 | 10.25 |
| Imperial | 95.34 | 37.14 | 0.81 | 140.55 | 138.39 | 80.57 | 27.32 | 78.28 | 14.94 |
| Inyo | 29.95 | 5.43 | 0.69 | 9.28 | 252.09 | 2.38 | 4.65 | 149.97 | 21.26 |
| Kern | 398.90 | 228.13 | 9.84 | 270.40 | 69.51 | 38.62 | 99.84 | 46.87 | 25.56 |
| Kings | 79.75 | 30.69 | 0.95 | 130.51 | 18.66 | 25.69 | 23.62 | 11.51 | 5.77 |
| Lake | 84.17 | 6.97 | 0.61 | 18.95 | 9.77 | 0.87 | 9.24 | 6.77 | 4.31 |
| Lassen | 61.27 | 7.13 | 0.68 | 20.86 | 11.90 | 2.33 | 7.10 | 8.68 | 5.64 |
| Los Angeles | 2,578.33 | 717.89 | 53.74 | 567.22 | 299.58 | 53.31 | 451.19 | 167.39 | 63.69 |
| Madera | 107.69 | 34.31 | 0.95 | 82.05 | 18.69 | 15.48 | 22.97 | 12.71 | 7.89 |
| Marin | 88.30 | 19.15 | 2.33 | 47.50 | 13.45 | 3.59 | 15.21 | 8.47 | 4.52 |
| Mariposa | 27.02 | 2.05 | 0.04 | 15.79 | 4.73 | 1.92 | 4.42 | 3.38 | 2.13 |
| Mendocino | 91.70 | 25.95 | 6.55 | 29.23 | 20.77 | 2.41 | 11.54 | 14.28 | 8.17 |
| Merced | 153.76 | 57.67 | 1.36 | 229.81 | 25.67 | 42.71 | 37.10 | 15.97 | 7.79 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 22.92 | 4.18 | 0.25 | 23.16 | 6.49 | 2.68 | 4.14 | 4.38 | 2.25 |
| Mono | 30.33 | 3.28 | 0.07 | 6.81 | 18.81 | 1.05 | 3.31 | 11.94 | 3.78 |
| Monterey | 197.82 | 60.16 | 9.14 | 170.29 | 30.60 | 8.73 | 27.13 | 18.16 | 8.28 |
| Napa | 66.59 | 12.05 | 0.11 | 30.94 | 13.12 | 2.27 | 10.55 | 8.10 | 4.02 |
| Nevada | 130.07 | 15.19 | 0.78 | 24.41 | 24.48 | 1.23 | 12.58 | 18.02 | 12.77 |
| Orange | 738.82 | 181.69 | 5.02 | 187.85 | 95.24 | 16.10 | 134.84 | 51.83 | 16.70 |
| Placer | 182.15 | 38.43 | 0.69 | 72.22 | 36.94 | 3.21 | 27.82 | 23.31 | 12.37 |
| Plumas | 119.50 | 7.13 | 0.59 | 16.72 | 12.62 | 0.97 | 8.70 | 10.06 | 7.42 |
| Riverside | 572.65 | 204.67 | 2.20 | 168.41 | 123.41 | 21.93 | 97.43 | 67.38 | 18.56 |
| Sacramento | 422.12 | 89.32 | 1.10 | 161.39 | 74.78 | 12.82 | 73.20 | 43.31 | 18.12 |
| San Benito | 28.18 | 12.52 | 0.11 | 36.81 | 7.96 | 3.76 | 5.43 | 4.44 | 1.60 |
| San Bernardino | 706.20 | 308.42 | 7.65 | 259.87 | 212.82 | 28.13 | 124.98 | 124.34 | 41.78 |
| San Diego | 1,000.13 | 227.64 | 13.71 | 573.61 | 191.45 | 21.50 | 174.87 | 107.30 | 37.10 |
| San Francisco | 197.19 | 56.66 | 6.63 | 55.41 | 26.87 | 2.51 | 36.80 | 17.61 | 10.14 |
| San Joaquin | 249.49 | 100.68 | 5.22 | 159.90 | 44.99 | 27.61 | 51.04 | 26.86 | 13.10 |
| San Luis Obispo | 179.20 | 36.91 | 21.29 | 59.51 | 36.35 | 6.40 | 23.33 | 23.19 | 12.17 |
| San Mateo | 246.49 | 77.67 | 14.18 | 105.92 | 33.40 | 3.23 | 41.19 | 20.90 | 11.09 |
| Santa Barbara | 250.56 | 110.68 | 41.34 | 206.87 | 53.10 | 6.48 | 70.13 | 37.38 | 23.10 |
| Santa Clara | 544.79 | 115.96 | 2.66 | 256.57 | 75.15 | 7.89 | 90.38 | 44.84 | 20.60 |
| Santa Cruz | 136.26 | 24.35 | 4.81 | 107.34 | 20.35 | 2.27 | 15.86 | 12.59 | 6.92 |
| Shasta | 193.89 | 39.48 | 0.84 | 39.32 | 43.73 | 3.13 | 20.26 | 34.48 | 25.82 |
| Sierra | 13.25 | 1.17 | 0.19 | 4.54 | 3.31 | 0.37 | 2.42 | 2.14 | 0.84 |
| Siskiyou | 260.18 | 20.22 | 0.78 | 43.74 | 31.82 | 2.58 | 20.09 | 25.44 | 18.53 |
| Solano | 160.76 | 52.05 | 19.89 | 60.18 | 34.01 | 5.27 | 30.61 | 19.03 | 7.60 |
| Sonoma | 218.61 | 40.12 | 3.03 | 106.68 | 35.64 | 11.29 | 36.41 | 22.76 | 12.34 |
| Stanislaus | 187.42 | 55.48 | 2.25 | 324.86 | 33.13 | 59.32 | 51.96 | 20.46 | 10.36 |
| Sutter | 44.27 | 16.82 | 0.26 | 11.79 | 13.68 | 2.69 | 6.98 | 7.82 | 3.27 |
| Tehama | 63.65 | 19.06 | 0.31 | 30.23 | 13.85 | 3.06 | 9.13 | 9.66 | 5.74 |
| Trinity | 25.61 | 3.30 | 0.06 | 6.91 | 9.01 | 0.76 | 2.90 | 5.96 | 2.32 |
| Tulare | 174.95 | 48.34 | 0.92 | 390.30 | 35.07 | 76.61 | 57.66 | 21.51 | 10.38 |
| Tuolumne | 121.50 | 8.66 | 0.55 | 22.00 | 17.65 | 2.41 | 12.19 | 12.75 | 9.64 |
| Ventura | 297.63 | 72.88 | 8.52 | 87.62 | 46.88 | 8.29 | 55.26 | 30.01 | 16.46 |
| Yolo | 71.32 | 25.72 | 0.75 | 35.66 | 48.11 | 3.35 | 14.06 | 24.16 | 5.69 |
| Yuba | 42.66 | 7.49 | 0.27 | 15.87 | 8.13 | 2.42 | 6.80 | 5.07 | 2.66 |

# Table 3.34. Totals for Wednesday, January 11, 2014 by County: Baseline

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 336.24 | 109.41 | 5.88 | 199.11 | 82.05 | 5.73 | 70.58 | 48.28 | 21.49 |
| Alpine | 3.48 | 0.35 | 0.01 | 1.71 | 1.17 | 0.18 | 0.67 | 0.75 | 0.35 |
| Amador | 33.46 | 4.56 | 0.19 | 17.12 | 13.00 | 1.38 | 6.31 | 8.23 | 5.21 |
| Butte | 105.11 | 19.13 | 0.26 | 25.85 | 29.68 | 4.26 | 15.41 | 19.12 | 10.34 |
| Calaveras | 51.39 | 3.91 | 0.09 | 15.37 | 9.98 | 0.90 | 6.64 | 7.44 | 5.30 |
| Colusa | 17.10 | 11.28 | 0.30 | 18.72 | 10.05 | 4.43 | 5.60 | 5.44 | 1.76 |
| Contra Costa | 223.03 | 75.45 | 39.63 | 207.82 | 55.19 | 5.01 | 58.94 | 33.63 | 16.90 |
| Del Norte | 23.39 | 7.52 | 3.98 | 16.97 | 7.36 | 0.72 | 2.90 | 5.11 | 3.03 |
| El Dorado | 128.89 | 8.35 | 0.48 | 36.37 | 30.80 | 1.73 | 16.71 | 21.26 | 13.88 |
| Fresno | 315.60 | 84.75 | 10.90 | 472.96 | 78.37 | 86.82 | 78.80 | 48.47 | 23.39 |
| Glenn | 47.03 | 8.61 | 0.13 | 28.41 | 13.02 | 5.40 | 7.94 | 8.57 | 5.16 |
| Humboldt | 105.43 | 34.10 | 10.11 | 64.37 | 23.34 | 4.69 | 15.47 | 16.39 | 10.40 |
| Imperial | 75.36 | 29.09 | 0.38 | 139.27 | 144.05 | 80.52 | 26.16 | 81.12 | 15.05 |
| Inyo | 24.54 | 3.92 | 0.72 | 9.11 | 37.80 | 2.37 | 4.53 | 22.50 | 4.33 |
| Kern | 309.34 | 174.50 | 8.88 | 230.16 | 75.98 | 46.54 | 84.95 | 48.66 | 23.99 |
| Kings | 75.54 | 25.52 | 0.90 | 88.78 | 21.02 | 33.90 | 21.62 | 13.08 | 6.77 |
| Lake | 72.34 | 5.23 | 0.58 | 18.99 | 10.43 | 0.86 | 8.60 | 7.01 | 4.23 |
| Lassen | 52.94 | 5.75 | 0.46 | 20.04 | 11.93 | 2.31 | 6.51 | 8.51 | 5.33 |
| Los Angeles | 1,468.99 | 470.37 | 60.94 | 410.70 | 295.24 | 47.61 | 304.29 | 162.94 | 60.61 |
| Madera | 108.72 | 30.37 | 0.97 | 65.52 | 22.92 | 20.05 | 21.84 | 15.26 | 9.01 |
| Marin | 58.97 | 16.00 | 3.48 | 44.96 | 15.03 | 3.45 | 11.66 | 9.40 | 4.93 |
| Mariposa | 22.97 | 1.54 | 0.04 | 15.53 | 5.13 | 1.92 | 4.18 | 3.57 | 2.16 |
| Mendocino | 79.08 | 25.27 | 9.60 | 24.53 | 22.39 | 2.40 | 10.65 | 15.42 | 8.88 |
| Merced | 116.93 | 40.49 | 1.09 | 162.32 | 27.77 | 61.61 | 28.34 | 16.48 | 7.20 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 18.96 | 3.43 | 0.08 | 22.54 | 6.36 | 2.67 | 3.65 | 4.21 | 2.07 |
| Mono | 26.90 | 2.24 | 0.06 | 6.60 | 19.53 | 1.05 | 3.12 | 12.29 | 3.80 |
| Monterey | 136.99 | 53.90 | 13.81 | 182.28 | 34.74 | 8.81 | 22.99 | 20.28 | 8.92 |
| Napa | 44.88 | 8.16 | 0.08 | 30.38 | 14.94 | 2.22 | 8.28 | 9.15 | 4.43 |
| Nevada | 113.99 | 10.67 | 0.71 | 23.60 | 26.28 | 1.23 | 11.69 | 18.90 | 12.95 |
| Orange | 479.18 | 119.09 | 6.78 | 152.44 | 96.84 | 14.71 | 100.51 | 52.38 | 16.50 |
| Placer | 140.20 | 27.00 | 0.44 | 71.84 | 42.08 | 3.19 | 24.28 | 25.91 | 13.11 |
| Plumas | 113.87 | 6.13 | 0.45 | 16.17 | 12.66 | 0.95 | 8.30 | 9.98 | 7.23 |
| Riverside | 358.85 | 126.84 | 1.31 | 131.39 | 151.56 | 17.33 | 76.92 | 80.66 | 19.35 |
| Sacramento | 294.23 | 60.43 | 0.74 | 146.39 | 82.23 | 12.57 | 56.33 | 47.07 | 19.17 |
| San Benito | 20.20 | 7.83 | 0.05 | 38.93 | 8.98 | 3.90 | 4.85 | 4.85 | 1.56 |
| San Bernardino | 473.96 | 218.92 | 5.80 | 221.90 | 234.17 | 23.82 | 103.81 | 135.06 | 43.83 |
| San Diego | 676.67 | 172.56 | 21.14 | 591.74 | 214.44 | 20.38 | 146.24 | 119.95 | 41.53 |
| San Francisco | 143.89 | 47.98 | 9.99 | 49.72 | 29.90 | 2.26 | 29.52 | 19.36 | 10.91 |
| San Joaquin | 179.29 | 74.60 | 5.49 | 119.37 | 47.85 | 37.65 | 40.65 | 27.24 | 11.83 |
| San Luis Obispo | 144.81 | 34.47 | 27.59 | 58.60 | 39.67 | 6.79 | 21.15 | 24.99 | 12.86 |
| San Mateo | 171.96 | 78.73 | 21.51 | 100.45 | 37.88 | 2.83 | 32.81 | 23.69 | 12.57 |
| Santa Barbara | 201.56 | 127.47 | 61.81 | 206.50 | 58.02 | 6.56 | 65.72 | 41.05 | 25.79 |
| Santa Clara | 379.60 | 83.04 | 2.51 | 243.13 | 82.76 | 6.96 | 70.75 | 48.71 | 21.54 |
| Santa Cruz | 103.36 | 21.64 | 6.51 | 120.50 | 22.10 | 2.27 | 13.20 | 13.45 | 7.16 |
| Shasta | 170.72 | 30.61 | 0.59 | 37.14 | 61.30 | 3.23 | 17.96 | 50.80 | 41.15 |
| Sierra | 12.83 | 1.03 | 0.18 | 4.78 | 3.41 | 0.36 | 2.64 | 2.19 | 0.85 |
| Siskiyou | 245.99 | 14.07 | 0.41 | 41.64 | 32.12 | 2.55 | 18.34 | 25.31 | 18.09 |
| Solano | 109.90 | 39.43 | 22.35 | 58.15 | 35.79 | 5.17 | 25.92 | 19.84 | 7.65 |
| Sonoma | 150.02 | 29.85 | 4.35 | 99.14 | 39.04 | 11.11 | 28.82 | 24.66 | 13.02 |
| Stanislaus | 143.34 | 44.02 | 2.22 | 260.71 | 34.92 | 77.30 | 41.43 | 20.96 | 9.93 |
| Sutter | 35.75 | 14.11 | 0.16 | 10.91 | 15.00 | 2.63 | 5.97 | 8.46 | 3.41 |
| Tehama | 51.27 | 13.52 | 0.15 | 29.36 | 14.52 | 3.05 | 8.10 | 9.86 | 5.59 |
| Trinity | 20.43 | 2.27 | 0.04 | 6.52 | 8.64 | 0.75 | 2.46 | 5.66 | 2.15 |
| Tulare | 132.15 | 34.66 | 0.71 | 254.22 | 38.33 | 106.34 | 42.13 | 23.06 | 10.64 |
| Tuolumne | 110.69 | 6.80 | 0.54 | 21.37 | 18.60 | 2.39 | 11.63 | 13.13 | 9.66 |
| Ventura | 216.83 | 56.85 | 12.53 | 83.50 | 50.63 | 8.10 | 46.72 | 31.92 | 17.00 |
| Yolo | 46.31 | 16.71 | 0.62 | 33.52 | 49.02 | 3.26 | 10.90 | 24.50 | 5.64 |
| Yuba | 35.53 | 5.82 | 0.19 | 15.41 | 9.13 | 2.51 | 6.35 | 5.57 | 2.81 |

# Table 3.35. Totals for Wednesday, January 11, 2014 by County: Adjustment 1

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 336.24 | 104.86 | 3.18 | 198.44 | 81.65 | 5.73 | 70.02 | 47.90 | 21.12 |
| Alpine | 3.48 | 0.33 | 0.01 | 1.71 | 1.17 | 0.18 | 0.67 | 0.75 | 0.35 |
| Amador | 33.46 | 4.41 | 0.19 | 17.11 | 12.99 | 1.38 | 6.30 | 8.23 | 5.20 |
| Butte | 105.11 | 20.17 | 0.26 | 28.36 | 29.66 | 4.26 | 16.67 | 19.10 | 10.33 |
| Calaveras | 51.39 | 3.70 | 0.09 | 15.35 | 9.97 | 0.90 | 6.62 | 7.44 | 5.29 |
| Colusa | 17.10 | 10.93 | 0.30 | 18.71 | 10.04 | 4.43 | 5.59 | 5.43 | 1.75 |
| Contra Costa | 223.03 | 73.28 | 38.29 | 207.40 | 54.99 | 5.01 | 58.58 | 33.43 | 16.72 |
| Del Norte | 23.39 | 7.44 | 3.98 | 16.96 | 7.36 | 0.72 | 2.89 | 5.11 | 3.03 |
| El Dorado | 128.89 | 7.98 | 0.48 | 36.29 | 30.79 | 1.73 | 16.64 | 21.25 | 13.88 |
| Fresno | 315.60 | 80.71 | 10.90 | 564.23 | 76.90 | 86.82 | 84.64 | 47.77 | 23.24 |
| Glenn | 47.03 | 8.35 | 0.13 | 28.40 | 13.02 | 5.40 | 7.93 | 8.56 | 5.15 |
| Humboldt | 105.43 | 33.46 | 10.11 | 64.31 | 23.33 | 4.69 | 15.42 | 16.38 | 10.39 |
| Imperial | 75.36 | 27.64 | 0.38 | 139.20 | 144.04 | 80.52 | 26.10 | 81.11 | 15.04 |
| Inyo | 24.54 | 3.71 | 0.72 | 9.10 | 37.80 | 2.37 | 4.52 | 22.49 | 4.33 |
| Kern | 309.34 | 166.49 | 8.88 | 274.24 | 73.07 | 46.54 | 87.42 | 47.28 | 23.72 |
| Kings | 67.98 | 24.22 | 0.85 | 150.88 | 19.78 | 33.90 | 23.46 | 12.03 | 5.86 |
| Lake | 72.34 | 4.98 | 0.58 | 18.97 | 10.42 | 0.86 | 8.57 | 7.00 | 4.22 |
| Lassen | 52.94 | 5.61 | 0.46 | 20.03 | 11.93 | 2.31 | 6.50 | 8.50 | 5.33 |
| Los Angeles | 1,468.99 | 448.69 | 60.94 | 406.27 | 294.79 | 47.61 | 300.66 | 162.49 | 60.25 |
| Madera | 108.72 | 29.31 | 0.97 | 92.68 | 22.63 | 20.05 | 23.85 | 15.12 | 8.98 |
| Marin | 58.97 | 15.40 | 2.79 | 44.85 | 14.92 | 3.45 | 11.57 | 9.29 | 4.83 |
| Mariposa | 22.97 | 1.46 | 0.04 | 15.52 | 5.12 | 1.92 | 4.17 | 3.57 | 2.16 |
| Mendocino | 79.08 | 24.67 | 9.60 | 24.49 | 22.38 | 2.40 | 10.62 | 15.41 | 8.87 |
| Merced | 116.93 | 38.11 | 1.09 | 285.04 | 26.84 | 61.61 | 37.89 | 16.04 | 7.12 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 18.96 | 3.38 | 0.08 | 22.53 | 6.36 | 2.67 | 3.65 | 4.21 | 2.07 |
| Mono | 26.90 | 2.10 | 0.06 | 6.60 | 19.53 | 1.05 | 3.12 | 12.29 | 3.79 |
| Monterey | 136.99 | 52.51 | 13.81 | 182.11 | 34.71 | 8.81 | 22.84 | 20.25 | 8.90 |
| Napa | 44.88 | 7.75 | 0.08 | 30.32 | 14.93 | 2.22 | 8.23 | 9.14 | 4.42 |
| Nevada | 113.99 | 10.05 | 0.71 | 23.55 | 26.27 | 1.23 | 11.65 | 18.89 | 12.94 |
| Orange | 479.18 | 113.11 | 6.78 | 151.06 | 96.69 | 14.71 | 99.36 | 52.24 | 16.39 |
| Placer | 140.20 | 25.83 | 0.44 | 71.71 | 42.06 | 3.19 | 24.17 | 25.89 | 13.09 |
| Plumas | 113.87 | 6.01 | 0.45 | 16.17 | 12.65 | 0.95 | 8.30 | 9.98 | 7.23 |
| Riverside | 358.85 | 119.20 | 1.31 | 130.51 | 151.43 | 17.33 | 76.18 | 80.54 | 19.25 |
| Sacramento | 294.23 | 59.05 | 0.74 | 158.05 | 82.16 | 12.57 | 59.39 | 47.00 | 19.12 |
| San Benito | 20.20 | 7.28 | 0.05 | 38.90 | 8.98 | 3.90 | 4.83 | 4.84 | 1.55 |
| San Bernardino | 473.96 | 210.19 | 5.80 | 221.02 | 234.01 | 23.82 | 103.06 | 134.91 | 43.70 |
| San Diego | 676.67 | 164.30 | 21.14 | 590.34 | 214.26 | 20.38 | 145.06 | 119.78 | 41.38 |
| San Francisco | 143.89 | 46.48 | 7.13 | 49.37 | 29.50 | 2.26 | 29.23 | 18.98 | 10.54 |
| San Joaquin | 179.29 | 70.30 | 5.04 | 180.23 | 46.66 | 37.65 | 45.06 | 26.62 | 11.61 |
| San Luis Obispo | 144.81 | 33.64 | 27.59 | 58.48 | 39.65 | 6.79 | 21.05 | 24.96 | 12.84 |
| San Mateo | 171.96 | 76.80 | 17.05 | 100.07 | 37.24 | 2.83 | 32.50 | 23.07 | 11.97 |
| Santa Barbara | 201.56 | 126.27 | 61.81 | 206.31 | 57.99 | 6.56 | 65.56 | 41.02 | 25.77 |
| Santa Clara | 379.60 | 79.29 | 2.51 | 242.26 | 82.68 | 6.96 | 70.05 | 48.63 | 21.48 |
| Santa Cruz | 103.36 | 21.01 | 6.51 | 120.39 | 22.08 | 2.27 | 13.10 | 13.44 | 7.15 |
| Shasta | 170.72 | 29.37 | 0.59 | 37.06 | 61.28 | 3.23 | 17.90 | 50.78 | 41.13 |
| Sierra | 12.83 | 1.01 | 0.18 | 4.77 | 3.41 | 0.36 | 2.64 | 2.19 | 0.84 |
| Siskiyou | 245.99 | 13.25 | 0.41 | 41.62 | 32.11 | 2.55 | 18.32 | 25.30 | 18.08 |
| Solano | 109.90 | 37.69 | 22.35 | 57.97 | 35.76 | 5.17 | 25.77 | 19.80 | 7.62 |
| Sonoma | 150.02 | 28.69 | 3.54 | 98.92 | 38.90 | 11.11 | 28.64 | 24.53 | 12.89 |
| Stanislaus | 143.34 | 42.12 | 2.22 | 368.19 | 34.13 | 77.30 | 49.72 | 20.58 | 9.85 |
| Sutter | 35.75 | 13.44 | 0.16 | 10.86 | 14.99 | 2.63 | 5.93 | 8.45 | 3.40 |
| Tehama | 51.27 | 12.77 | 0.15 | 29.34 | 14.51 | 3.05 | 8.08 | 9.85 | 5.58 |
| Trinity | 20.43 | 2.11 | 0.04 | 6.52 | 8.64 | 0.75 | 2.46 | 5.65 | 2.15 |
| Tulare | 132.15 | 32.96 | 0.71 | 456.45 | 37.68 | 106.34 | 57.92 | 22.74 | 10.57 |
| Tuolumne | 110.69 | 6.58 | 0.54 | 21.35 | 18.59 | 2.39 | 11.61 | 13.12 | 9.66 |
| Ventura | 216.83 | 55.22 | 12.53 | 83.14 | 50.59 | 8.10 | 46.41 | 31.88 | 16.97 |
| Yolo | 46.31 | 16.50 | 0.49 | 36.34 | 49.00 | 3.26 | 11.55 | 24.47 | 5.61 |
| Yuba | 35.53 | 5.61 | 0.19 | 15.38 | 9.12 | 2.51 | 6.32 | 5.57 | 2.81 |

# Table 3.36. Totals for Wednesday, January 11, 2014 by County: Adjustment 2

| COUNTY | CO | NOX | SOX | TOG | PM | NH3 | ROG | PM10 | PM25 |
|---|---|---|---|---|---|---|---|---|---|
| Alameda | 336.24 | 104.86 | 3.18 | 198.44 | 81.65 | 5.73 | 70.02 | 47.90 | 21.12 |
| Alpine | 3.48 | 0.33 | 0.01 | 1.71 | 1.17 | 0.18 | 0.67 | 0.75 | 0.35 |
| Amador | 33.46 | 4.41 | 0.19 | 17.11 | 12.99 | 1.38 | 6.30 | 8.23 | 5.20 |
| Butte | 105.11 | 20.17 | 0.26 | 28.36 | 29.66 | 4.26 | 16.67 | 19.10 | 10.33 |
| Calaveras | 51.39 | 3.70 | 0.09 | 15.35 | 9.97 | 0.90 | 6.62 | 7.44 | 5.29 |
| Colusa | 17.10 | 10.93 | 0.30 | 18.71 | 10.04 | 4.43 | 5.59 | 5.43 | 1.75 |
| Contra Costa | 223.03 | 73.28 | 38.29 | 207.40 | 54.99 | 5.01 | 58.58 | 33.43 | 16.72 |
| Del Norte | 23.39 | 7.44 | 3.98 | 16.96 | 7.36 | 0.72 | 2.89 | 5.11 | 3.03 |
| El Dorado | 128.89 | 7.98 | 0.48 | 36.29 | 30.79 | 1.73 | 16.64 | 21.25 | 13.88 |
| Fresno | 283.34 | 73.01 | 10.82 | 530.11 | 69.44 | 78.73 | 78.02 | 40.83 | 16.95 |
| Glenn | 47.03 | 8.35 | 0.13 | 28.40 | 13.02 | 5.40 | 7.93 | 8.56 | 5.15 |
| Humboldt | 105.43 | 33.46 | 10.11 | 64.31 | 23.33 | 4.69 | 15.42 | 16.38 | 10.39 |
| Imperial | 75.36 | 27.64 | 0.38 | 139.20 | 144.04 | 80.52 | 26.10 | 81.11 | 15.04 |
| Inyo | 24.54 | 3.71 | 0.72 | 9.10 | 37.80 | 2.37 | 4.52 | 22.49 | 4.33 |
| Kern | 302.21 | 160.05 | 8.86 | 260.25 | 71.63 | 43.26 | 85.37 | 45.73 | 22.10 |
| Kings | 63.43 | 21.40 | 0.84 | 135.35 | 18.86 | 30.77 | 21.70 | 11.19 | 5.12 |
| Lake | 72.34 | 4.98 | 0.58 | 18.97 | 10.42 | 0.86 | 8.57 | 7.00 | 4.22 |
| Lassen | 52.94 | 5.61 | 0.46 | 20.03 | 11.93 | 2.31 | 6.50 | 8.50 | 5.33 |
| Los Angeles | 1,468.99 | 448.69 | 60.94 | 406.27 | 294.79 | 47.61 | 300.66 | 162.49 | 60.25 |
| Madera | 86.88 | 26.35 | 0.92 | 79.29 | 18.53 | 17.64 | 20.11 | 11.14 | 5.25 |
| Marin | 58.97 | 15.40 | 2.79 | 44.85 | 14.92 | 3.45 | 11.57 | 9.29 | 4.83 |
| Mariposa | 22.97 | 1.46 | 0.04 | 15.52 | 5.12 | 1.92 | 4.17 | 3.57 | 2.16 |
| Mendocino | 79.08 | 24.67 | 9.60 | 24.49 | 22.38 | 2.40 | 10.62 | 15.41 | 8.87 |
| Merced | 110.28 | 35.58 | 1.08 | 236.34 | 25.15 | 51.56 | 33.18 | 14.58 | 5.87 |
| Missing county | 0.00 | 0.00 | 0.00 | 709.42 | 0.00 | 0.00 | 578.69 | 0.00 | 0.00 |
| Modoc | 18.96 | 3.38 | 0.08 | 22.53 | 6.36 | 2.67 | 3.65 | 4.21 | 2.07 |
| Mono | 26.90 | 2.10 | 0.06 | 6.60 | 19.53 | 1.05 | 3.12 | 12.29 | 3.79 |
| Monterey | 136.99 | 52.51 | 13.81 | 182.11 | 34.71 | 8.81 | 22.84 | 20.25 | 8.90 |
| Napa | 44.88 | 7.75 | 0.08 | 30.32 | 14.93 | 2.22 | 8.23 | 9.14 | 4.42 |
| Nevada | 113.99 | 10.05 | 0.71 | 23.55 | 26.27 | 1.23 | 11.65 | 18.89 | 12.94 |
| Orange | 479.18 | 113.11 | 6.78 | 151.06 | 96.69 | 14.71 | 99.36 | 52.24 | 16.39 |
| Placer | 140.20 | 25.83 | 0.44 | 71.71 | 42.06 | 3.19 | 24.17 | 25.89 | 13.09 |
| Plumas | 113.87 | 6.01 | 0.45 | 16.17 | 12.65 | 0.95 | 8.30 | 9.98 | 7.23 |
| Riverside | 358.85 | 119.20 | 1.31 | 130.51 | 151.43 | 17.33 | 76.18 | 80.54 | 19.25 |
| Sacramento | 294.23 | 59.05 | 0.74 | 158.05 | 82.16 | 12.57 | 59.39 | 47.00 | 19.12 |
| San Benito | 20.20 | 7.28 | 0.05 | 38.90 | 8.98 | 3.90 | 4.83 | 4.84 | 1.55 |
| San Bernardino | 473.96 | 210.19 | 5.80 | 221.02 | 234.01 | 23.82 | 103.06 | 134.91 | 43.70 |
| San Diego | 676.67 | 164.30 | 21.14 | 590.34 | 214.26 | 20.38 | 145.06 | 119.78 | 41.38 |
| San Francisco | 143.89 | 46.48 | 7.13 | 49.37 | 29.50 | 2.26 | 29.23 | 18.98 | 10.54 |
| San Joaquin | 175.50 | 65.06 | 5.03 | 155.90 | 45.82 | 32.64 | 42.69 | 25.77 | 10.76 |
| San Luis Obispo | 144.81 | 33.64 | 27.59 | 58.48 | 39.65 | 6.79 | 21.05 | 24.96 | 12.84 |
| San Mateo | 171.96 | 76.80 | 17.05 | 100.07 | 37.24 | 2.83 | 32.50 | 23.07 | 11.97 |
| Santa Barbara | 201.56 | 126.27 | 61.81 | 206.31 | 57.99 | 6.56 | 65.56 | 41.02 | 25.77 |
| Santa Clara | 379.60 | 79.29 | 2.51 | 242.26 | 82.68 | 6.96 | 70.05 | 48.63 | 21.48 |
| Santa Cruz | 103.36 | 21.01 | 6.51 | 120.39 | 22.08 | 2.27 | 13.10 | 13.44 | 7.15 |
| Shasta | 170.72 | 29.37 | 0.59 | 37.06 | 61.28 | 3.23 | 17.90 | 50.78 | 41.13 |
| Sierra | 12.83 | 1.01 | 0.18 | 4.77 | 3.41 | 0.36 | 2.64 | 2.19 | 0.84 |
| Siskiyou | 245.99 | 13.25 | 0.41 | 41.62 | 32.11 | 2.55 | 18.32 | 25.30 | 18.08 |
| Solano | 109.90 | 37.69 | 22.35 | 57.97 | 35.76 | 5.17 | 25.77 | 19.80 | 7.62 |
| Sonoma | 150.02 | 28.69 | 3.54 | 98.92 | 38.90 | 11.11 | 28.64 | 24.53 | 12.89 |
| Stanislaus | 131.52 | 34.82 | 2.19 | 329.16 | 31.47 | 67.84 | 45.22 | 18.16 | 7.68 |
| Sutter | 35.75 | 13.44 | 0.16 | 10.86 | 14.99 | 2.63 | 5.93 | 8.45 | 3.40 |
| Tehama | 51.27 | 12.77 | 0.15 | 29.34 | 14.51 | 3.05 | 8.08 | 9.85 | 5.58 |
| Trinity | 20.43 | 2.11 | 0.04 | 6.52 | 8.64 | 0.75 | 2.46 | 5.65 | 2.15 |
| Tulare | 122.68 | 31.20 | 0.68 | 396.80 | 35.26 | 92.73 | 52.03 | 20.69 | 8.88 |
| Tuolumne | 110.69 | 6.58 | 0.54 | 21.35 | 18.59 | 2.39 | 11.61 | 13.12 | 9.66 |
| Ventura | 216.83 | 55.22 | 12.53 | 83.14 | 50.59 | 8.10 | 46.41 | 31.88 | 16.97 |
| Yolo | 46.31 | 16.50 | 0.49 | 36.34 | 49.00 | 3.26 | 11.55 | 24.47 | 5.61 |
| Yuba | 35.53 | 5.61 | 0.19 | 15.38 | 9.12 | 2.51 | 6.32 | 5.57 | 2.81 |

## 3.2 *Spatial Plots*

Spatial plots are useful to ensure that emissions are distributed correctly into each grid cell. Emissions are displayed with Adjustment 2 applied since the change in emissions spatially would be very difficult to detect at this scale between the baseline and adjusted versions.

- Spatial plot Figures 3.37 through 3.40 show domain total emissions by pollutant in 2000 for the following days:
    - Wednesday January 11
    - Saturday January 16
    - Wednesday July 11
    - Saturday July 16
- Spatial plot Figures 3.41 through 3.44 show domain total emissions by pollutant in 2005 for the following days:
    - Wednesday January 11
    - Saturday January 16
    - Wednesday July 11
    - Saturday July 16
- Spatial plot Figures 3.45 through 3.48 show domain total emissions by pollutant in 2014 for the following days:
    - Wednesday January 11
    - Saturday January 16
    - Wednesday July 11
    - Saturday July 16

**Figure 3.37. Emissions by pollutant for Wednesday, January 11, 2000**

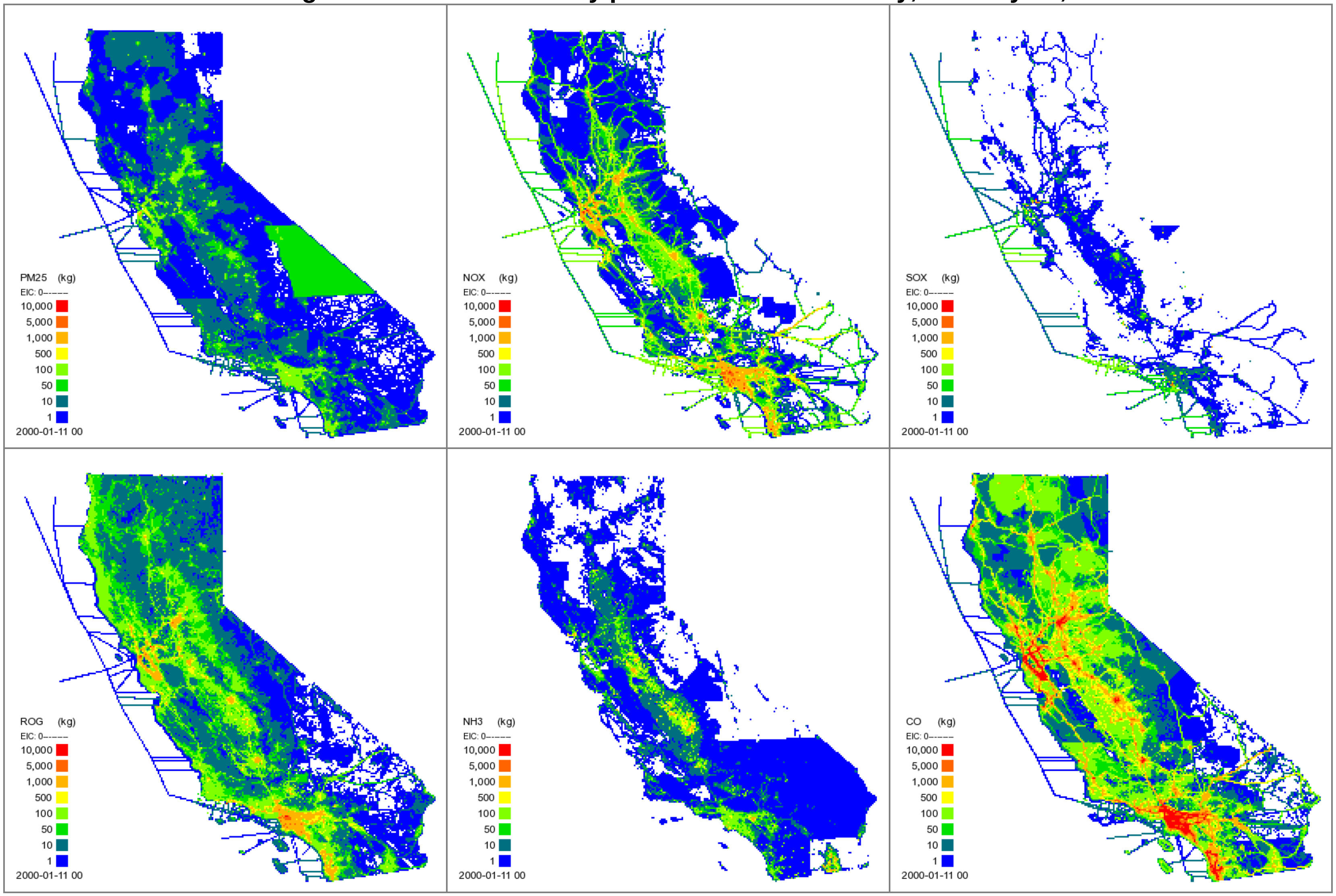


**Figure 3.38. Emissions by pollutant for Saturday, January 16, 2000**

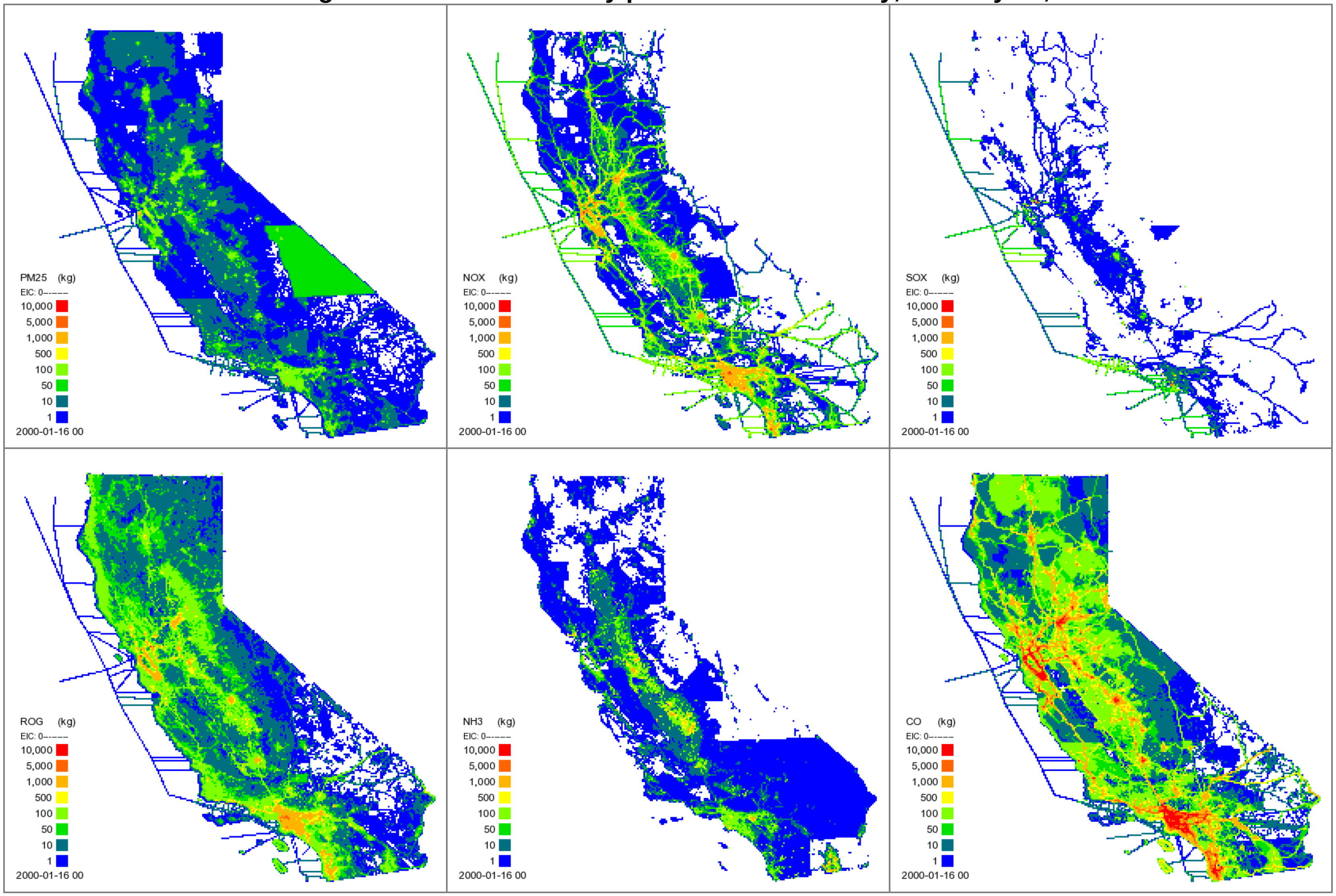


**Figure 3.39. Emissions by pollutant for Wednesday, July 11, 2000**

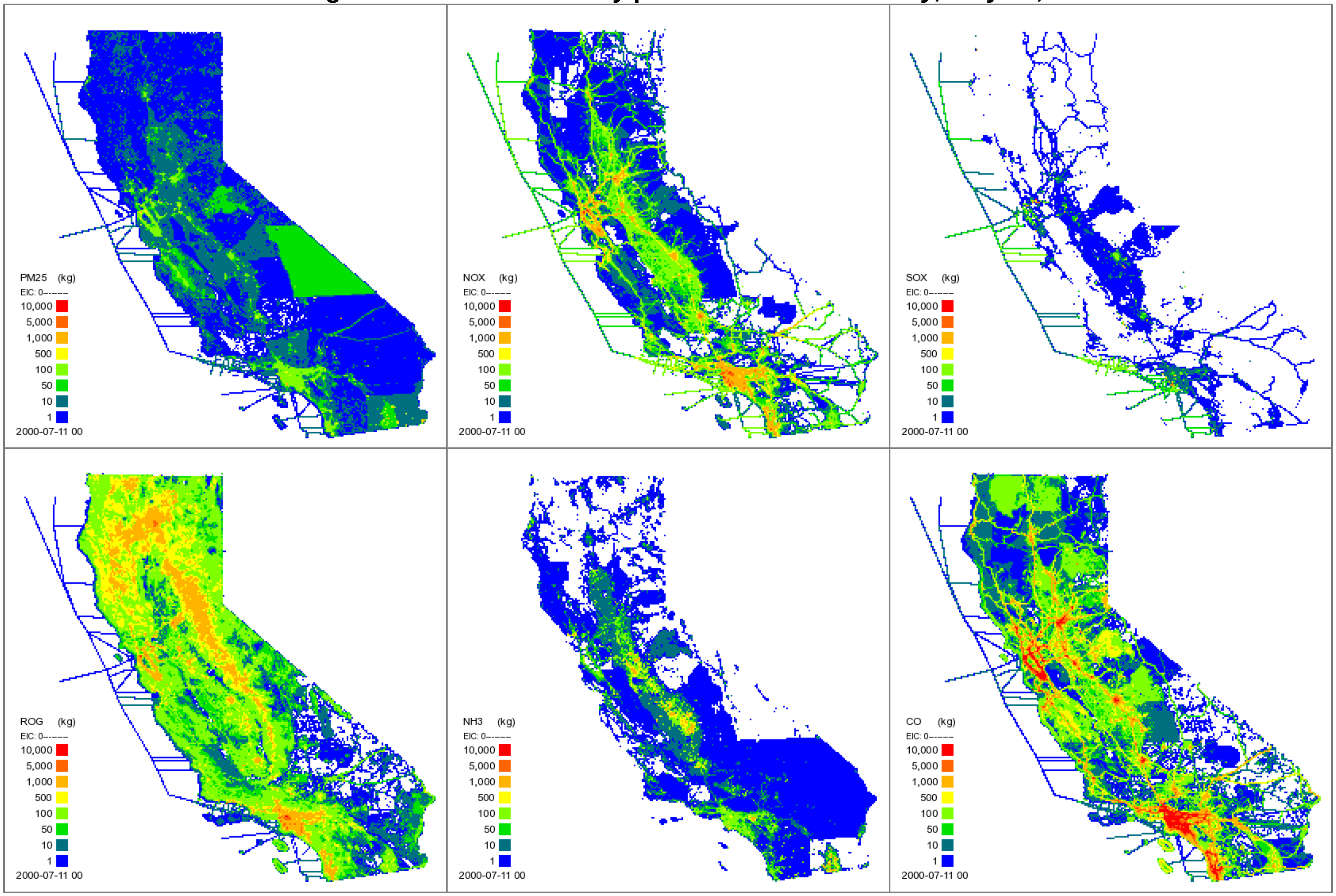


**Figure 3.40. Emissions by pollutant for Saturday, July 16, 2000**

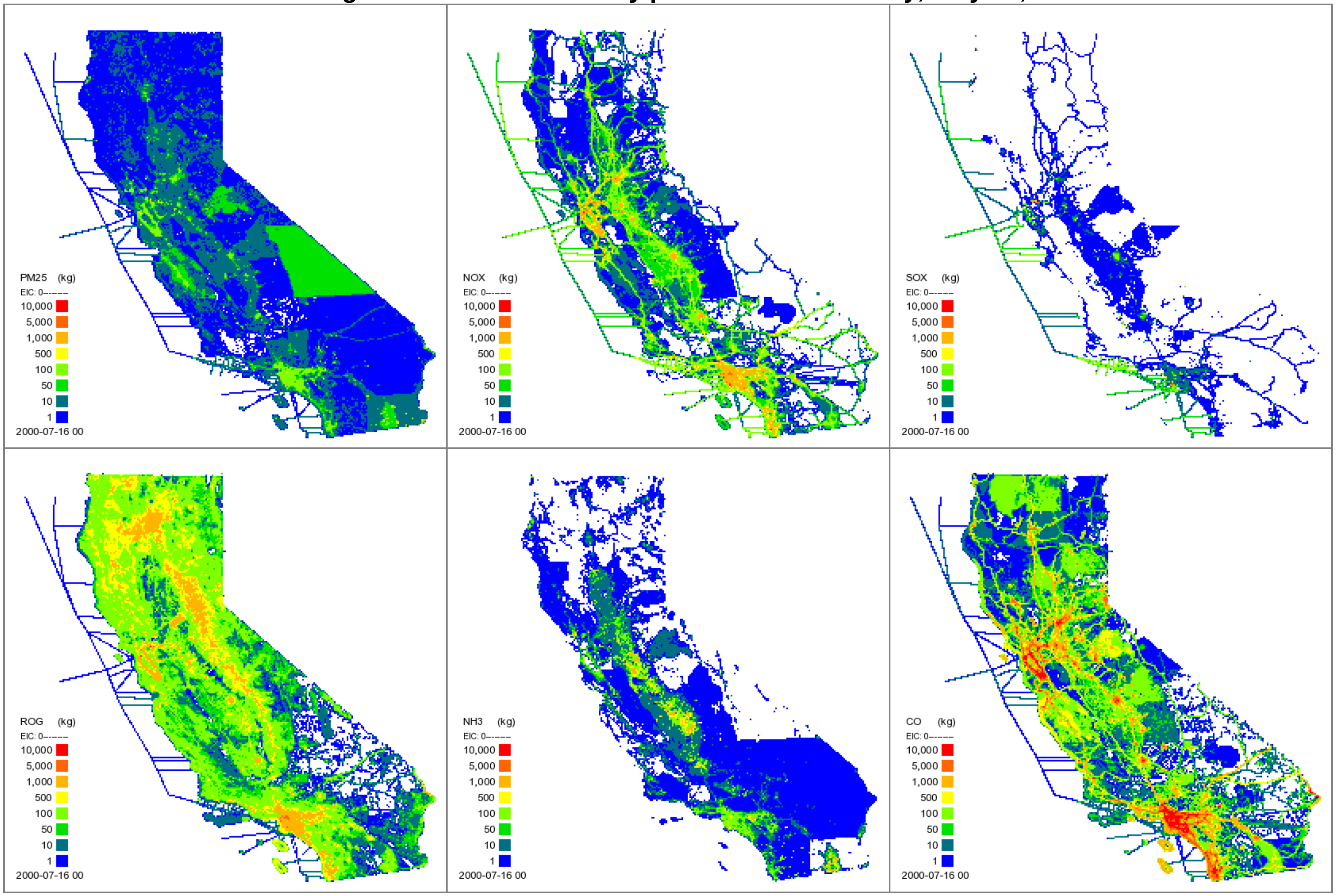


Figure 3.41.  Emissions by pollutant for Wednesday, January 11, 2005

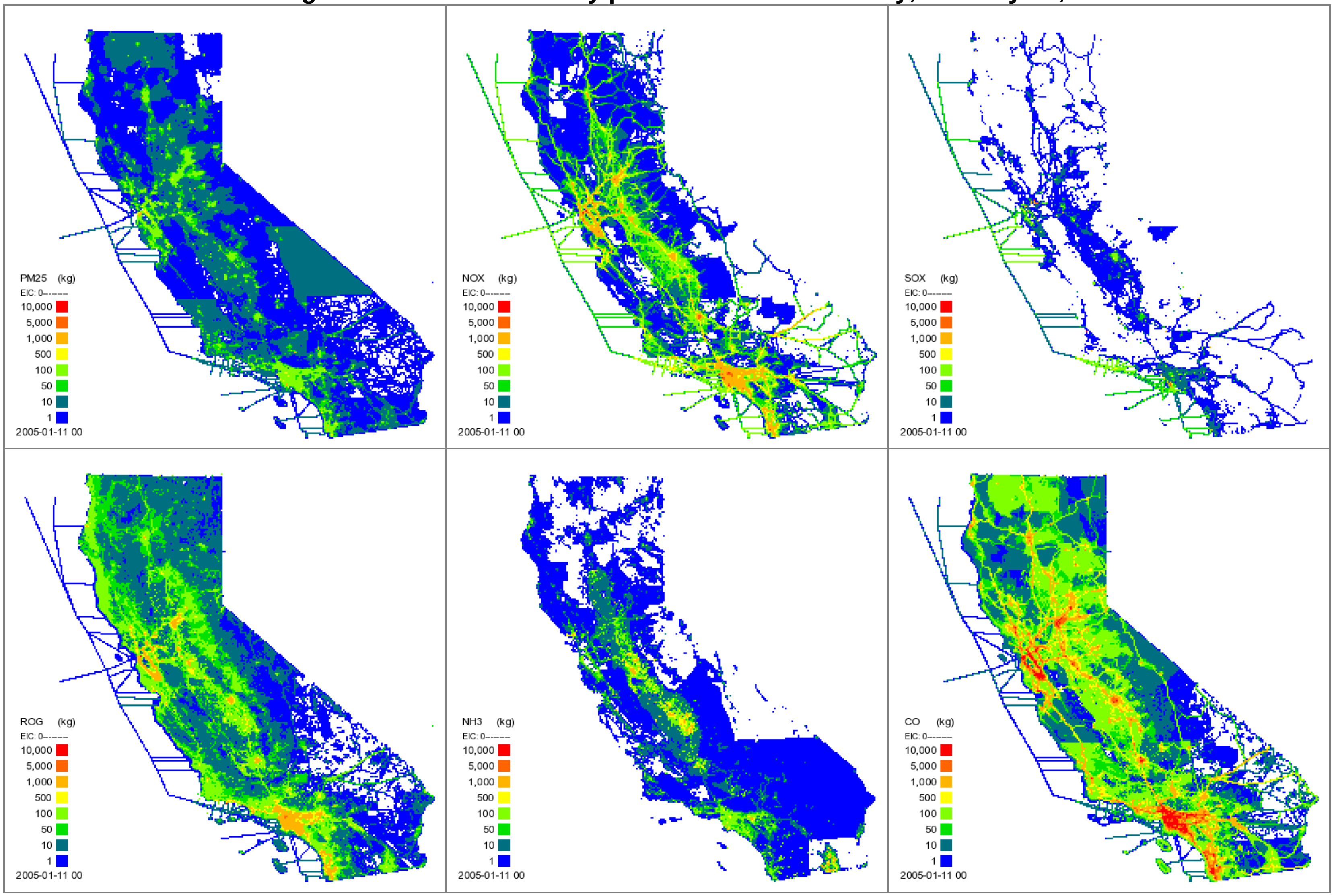
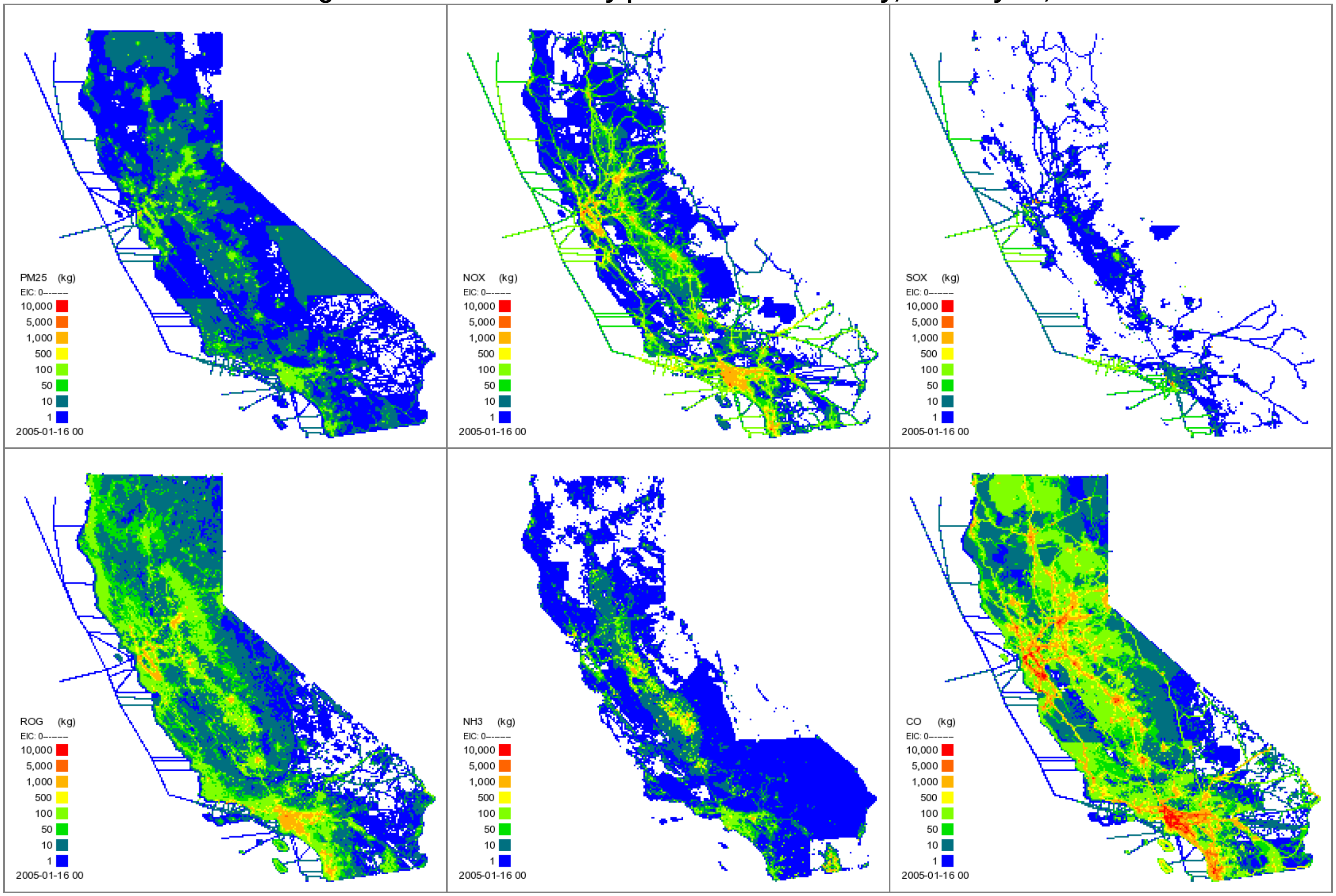


**Figure 3.42. Emissions by pollutant for Saturday, January 16, 2005**



## Figure 3.43. Emissions by pollutant for Wednesday, July 11, 2005

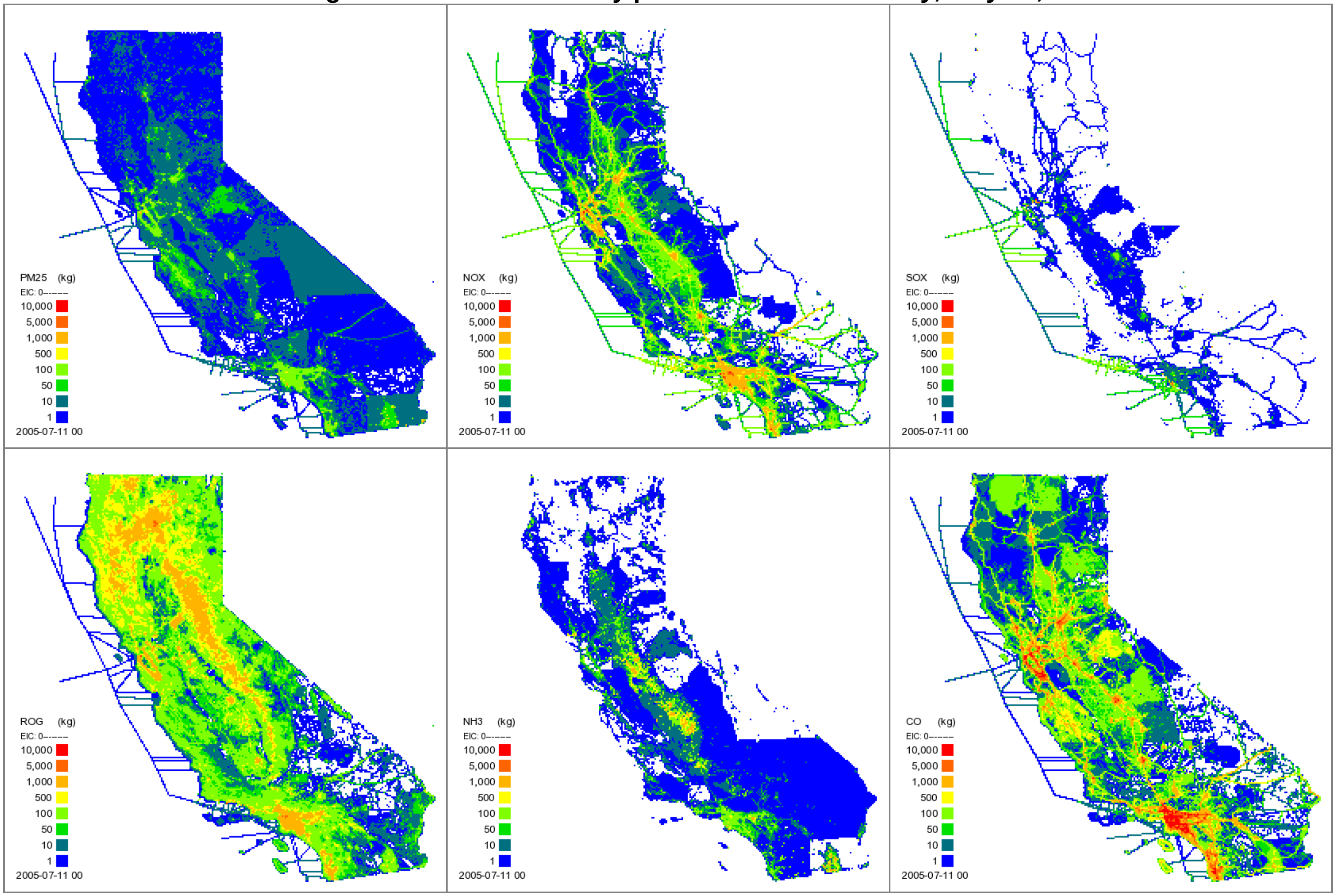


**Figure 3.44. Emissions by pollutant for Saturday, July 16, 2005**

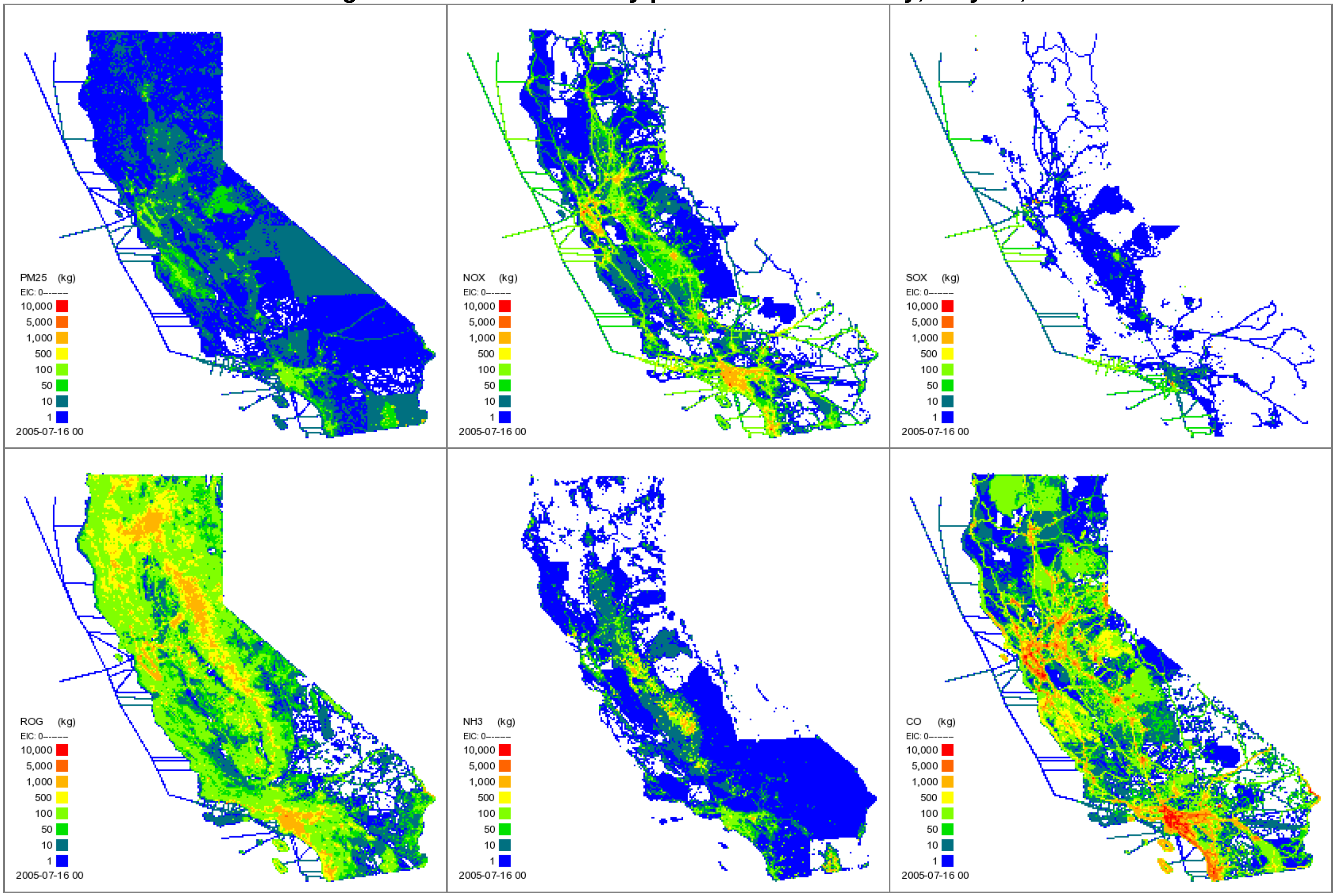


**Figure 3.45. Emissions by pollutant for Wednesday, January 11, 2014**

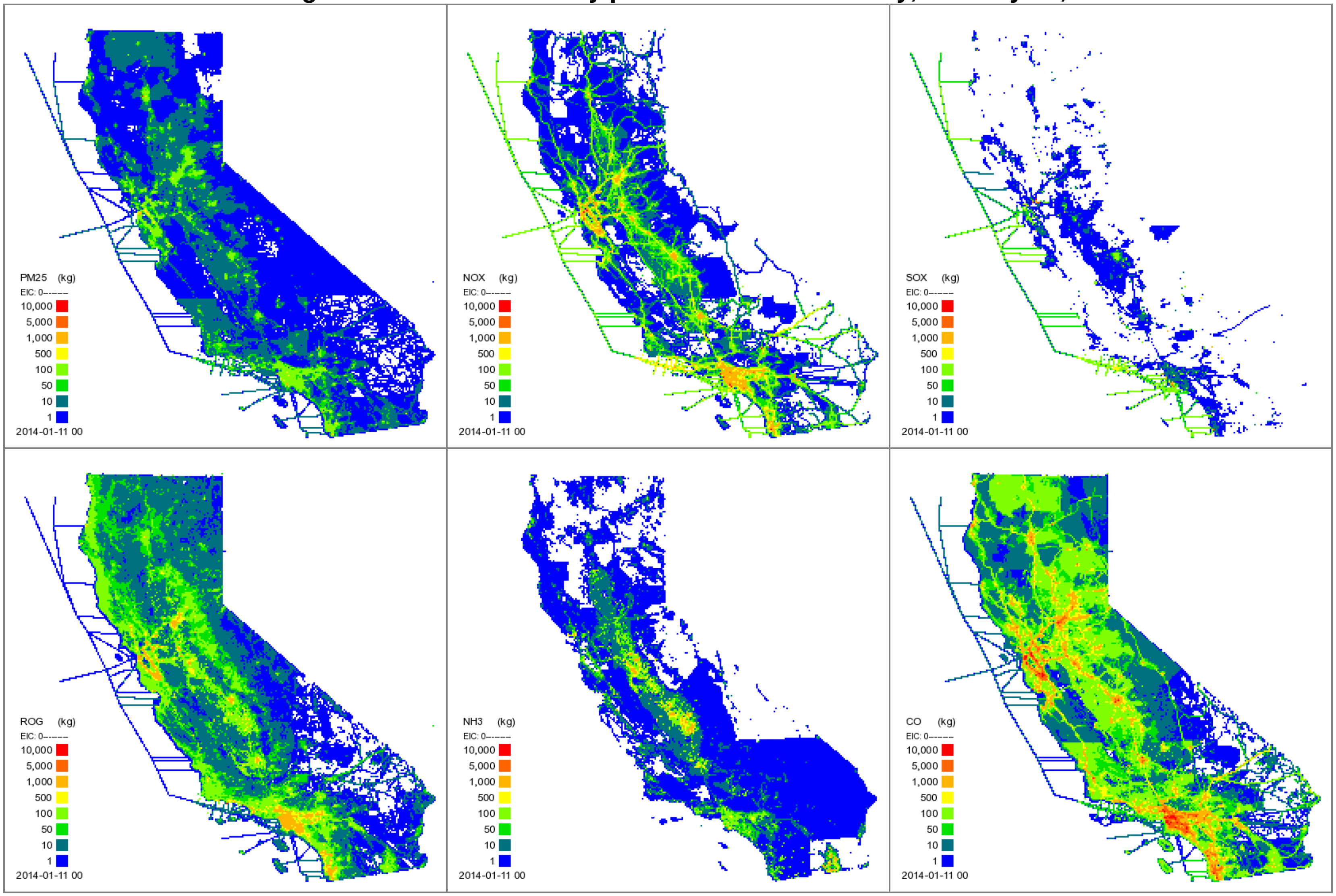


**Figure 3.46. Emissions by pollutant for Saturday, January 16, 2014**

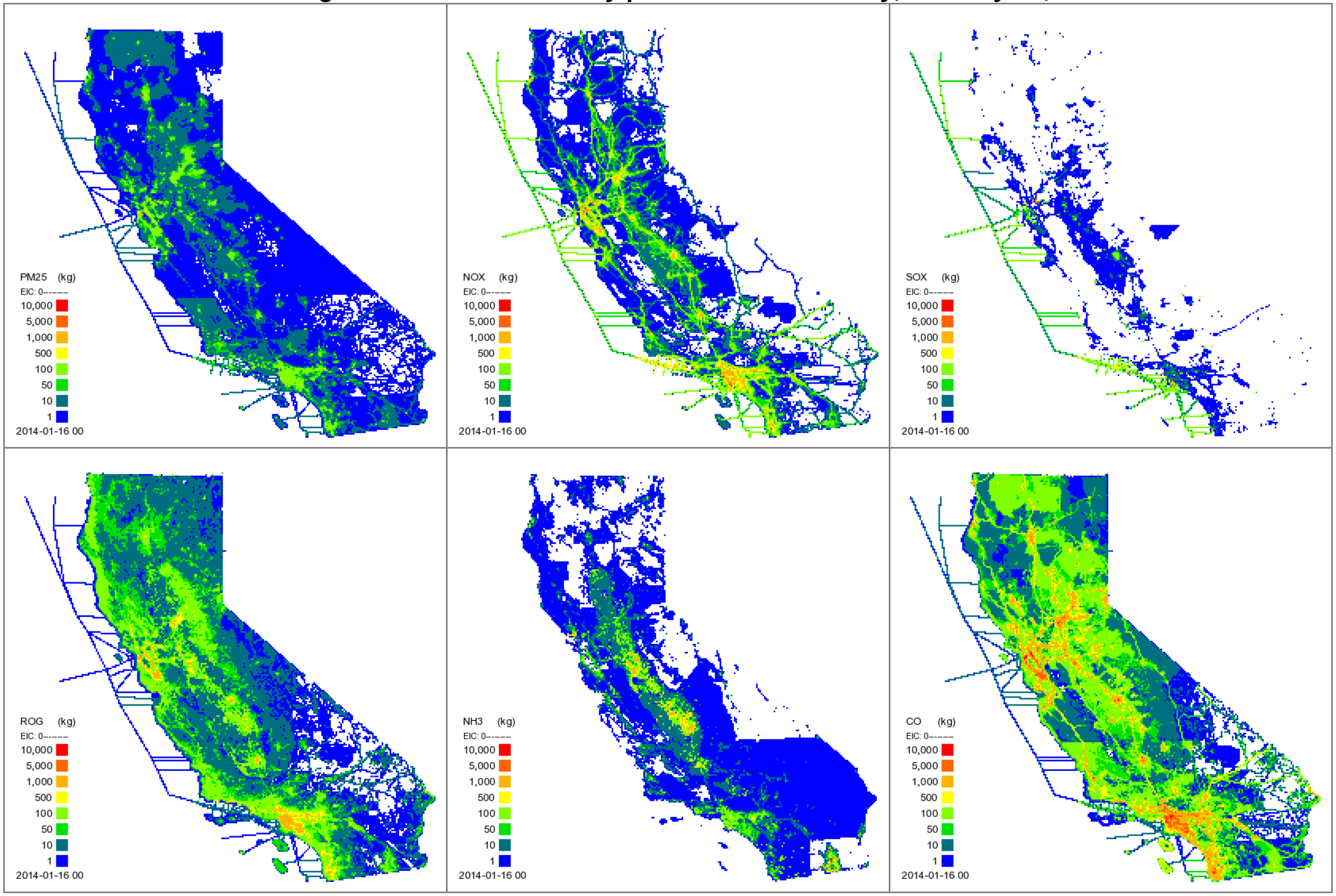


**Figure 3.47. Emissions by pollutant for Wednesday, July 11, 2014**

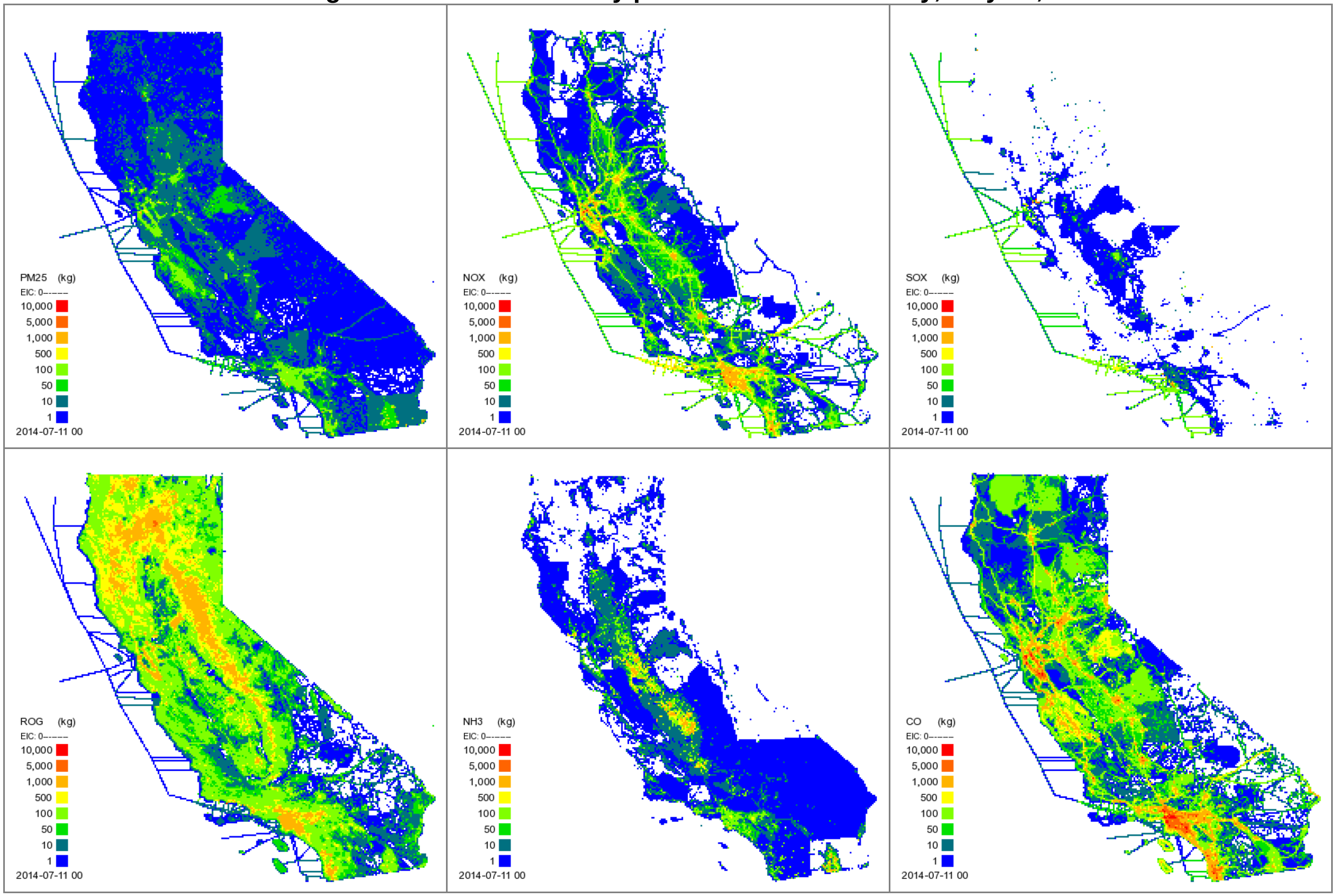
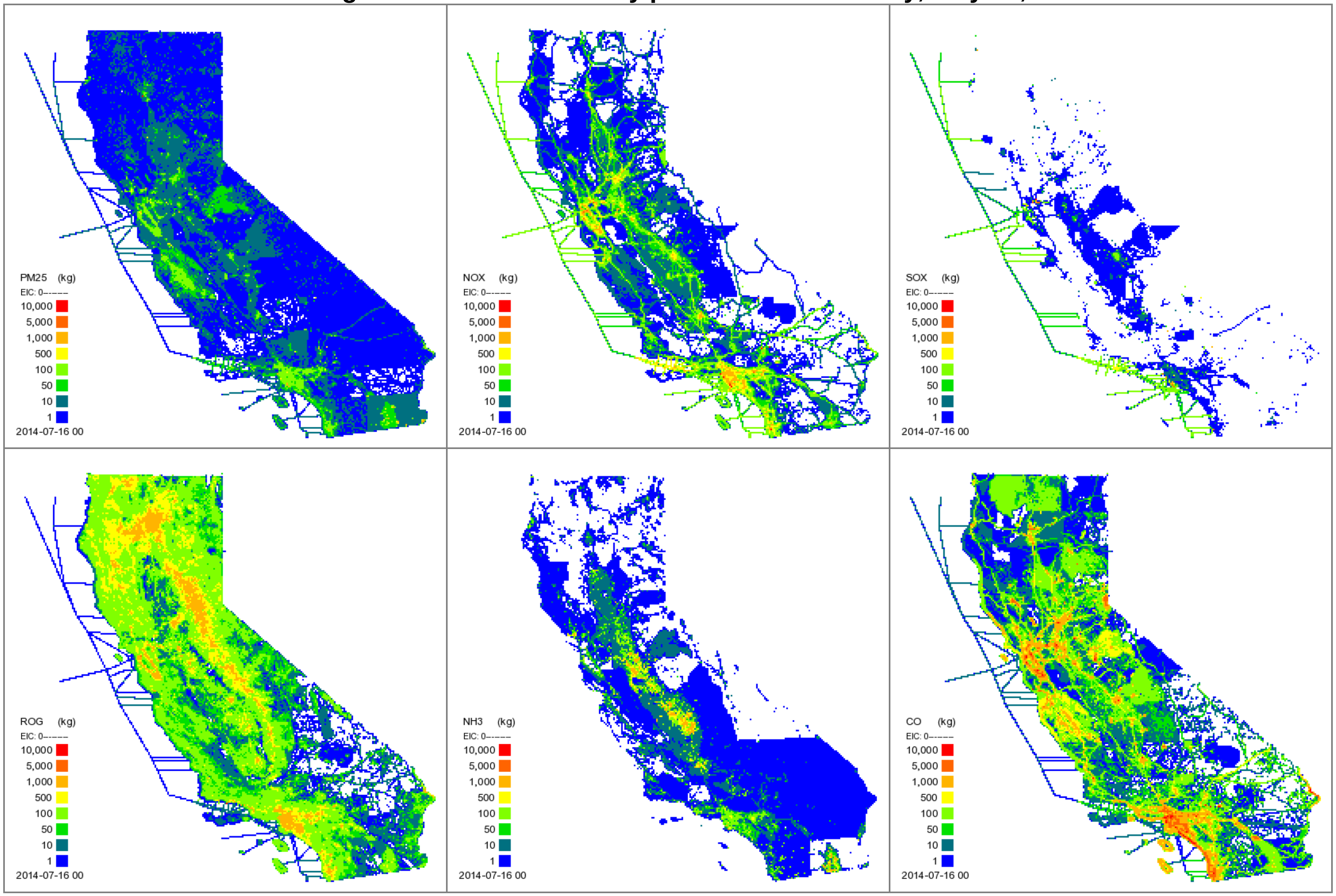


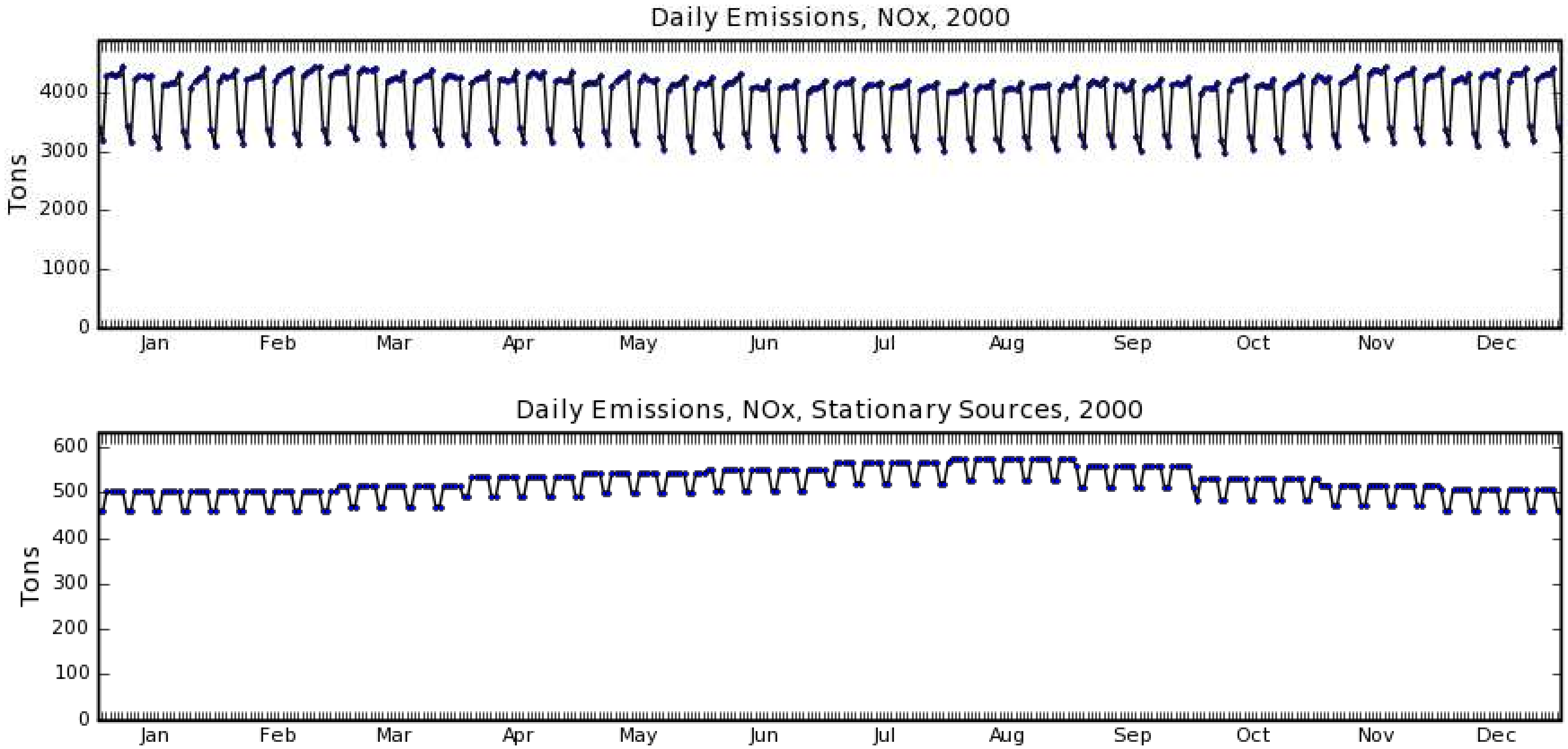
**Figure 3.48. Emissions by pollutant for Saturday, July 16, 2014**

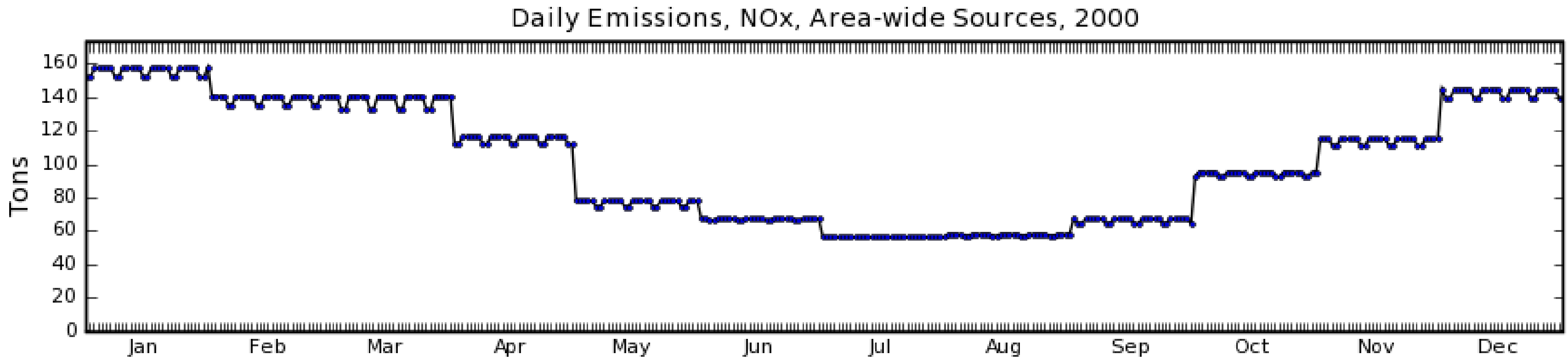


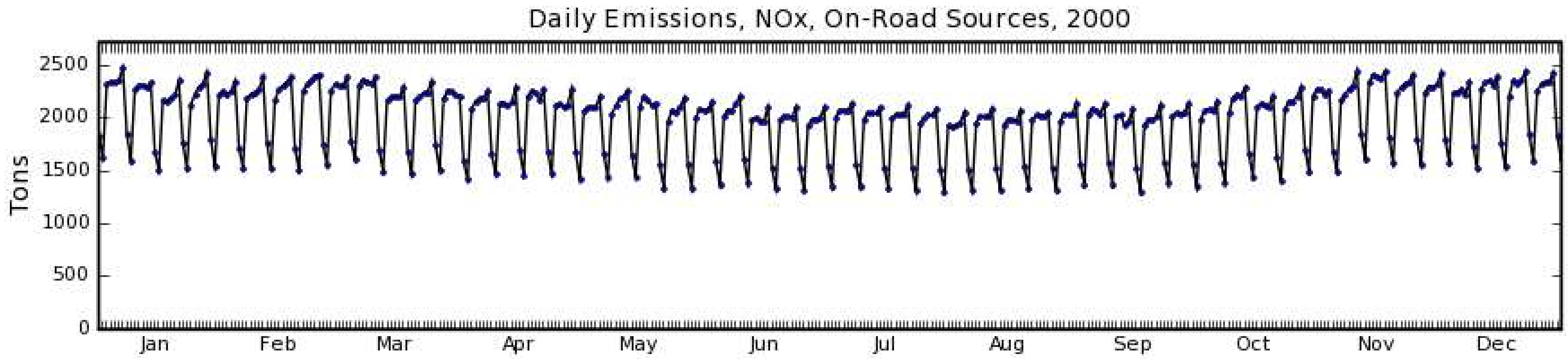
## 3.3 *Time Series Plots – Totals by Day*

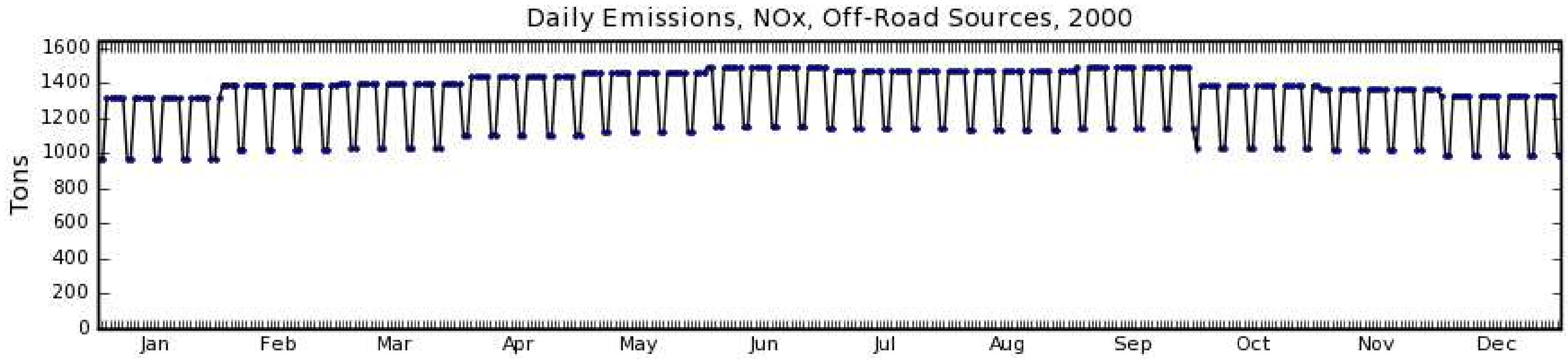
Time series plots are useful to ensure that emissions are distributed correctly in time across the modeling period. Time series plots 6.49 through 6.52 show daily total emissions of NOx, $PM_{2.5}$, SOx and $NH_3$ for the CCOS domain in the year 2000. The first plot shows all sources combined followed by daily emissions broken down into stationary, area-wide, on-road, other mobile and biogenics. Similarly, time series plots 6.53 through 6.56 show data for 2005 and while plots 6.57 through 6.60 show data for 2014.

**Figure 3.49. Daily Emissions of NOx in 2000**




Daily Emissions, NOx, Area-wide Sources, 2000
Tons
160
140
120
100
80
60
40
20
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NOx, On-Road Sources, 2000
Tons
2500
2000
1500
1000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NOx, Off-Road Sources, 2000
Tons
1600
1400
1200
1000
800
600
400
200
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

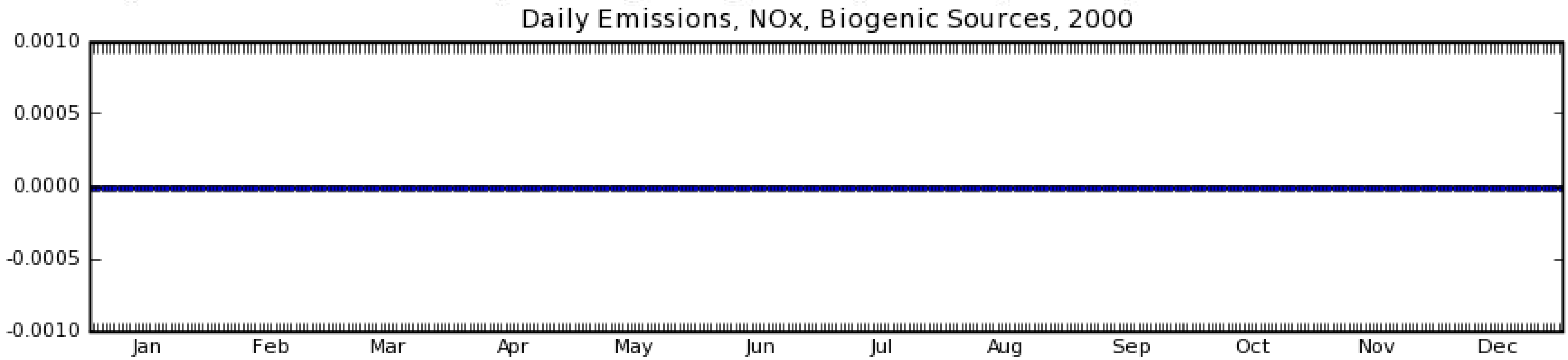
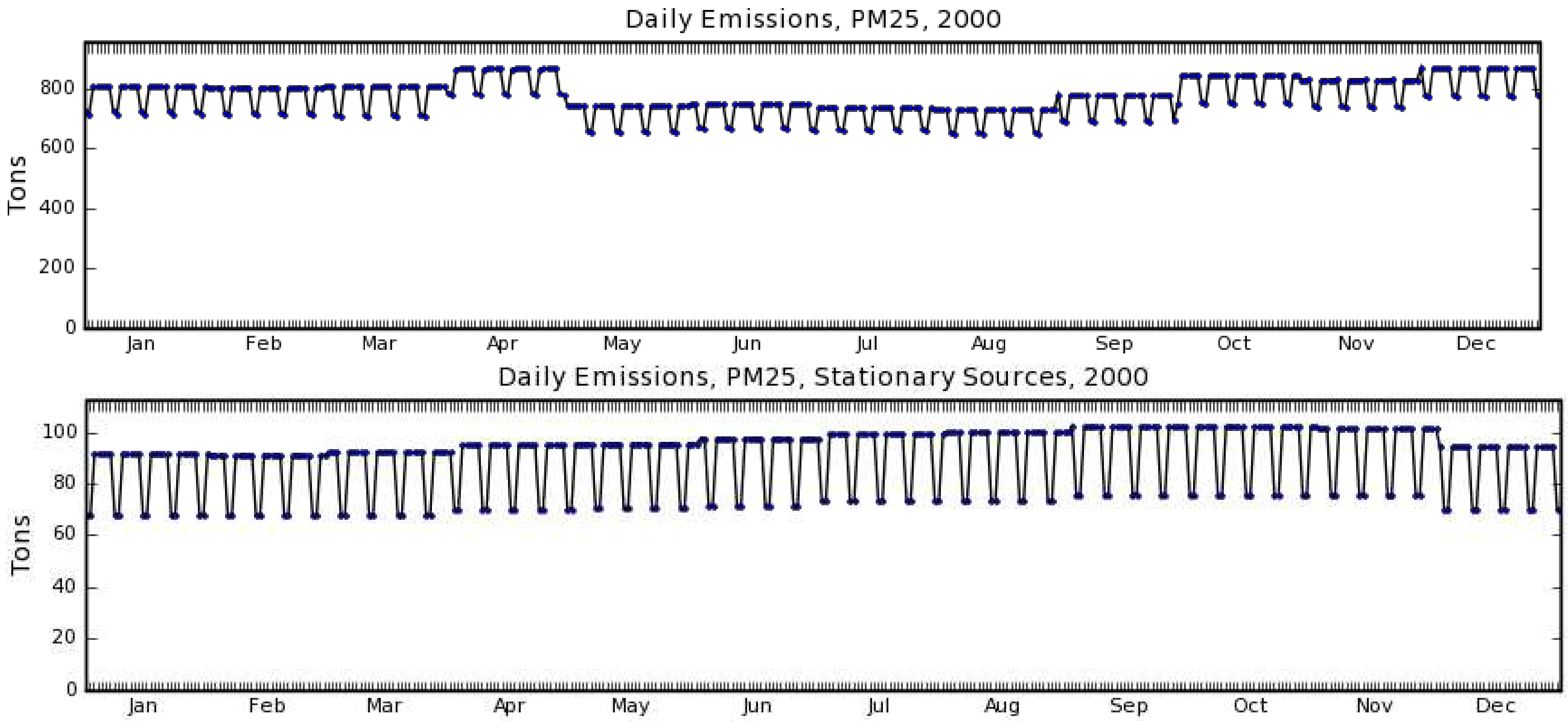
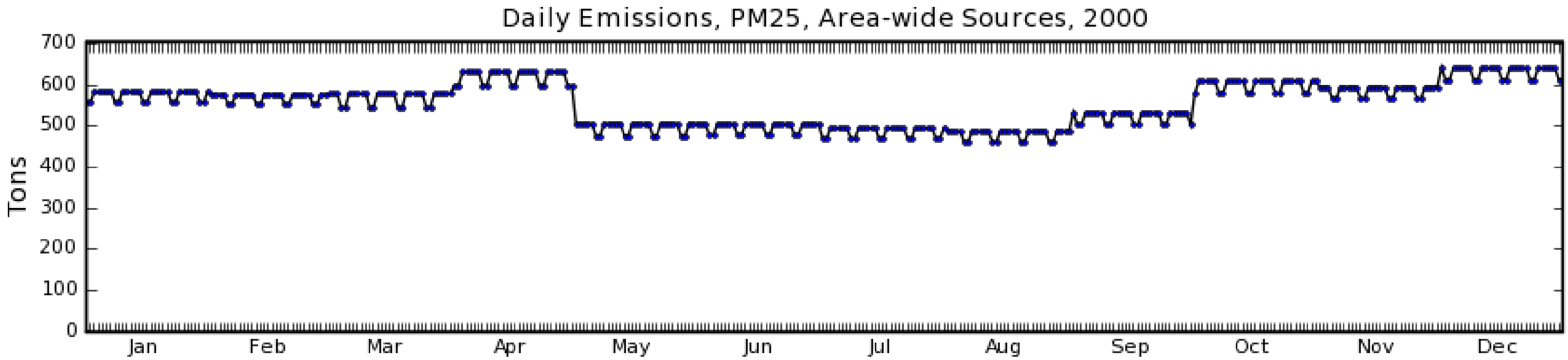
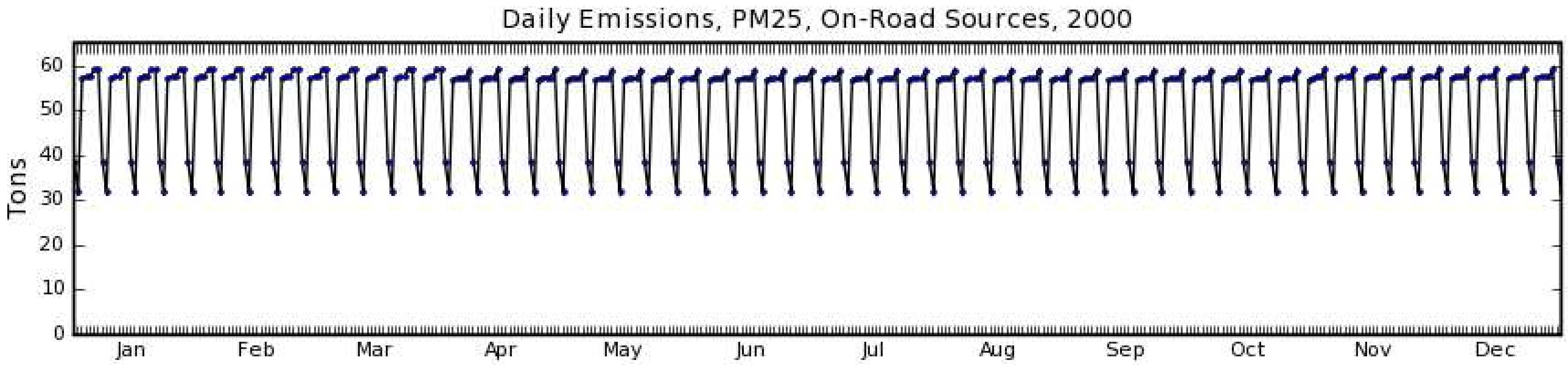
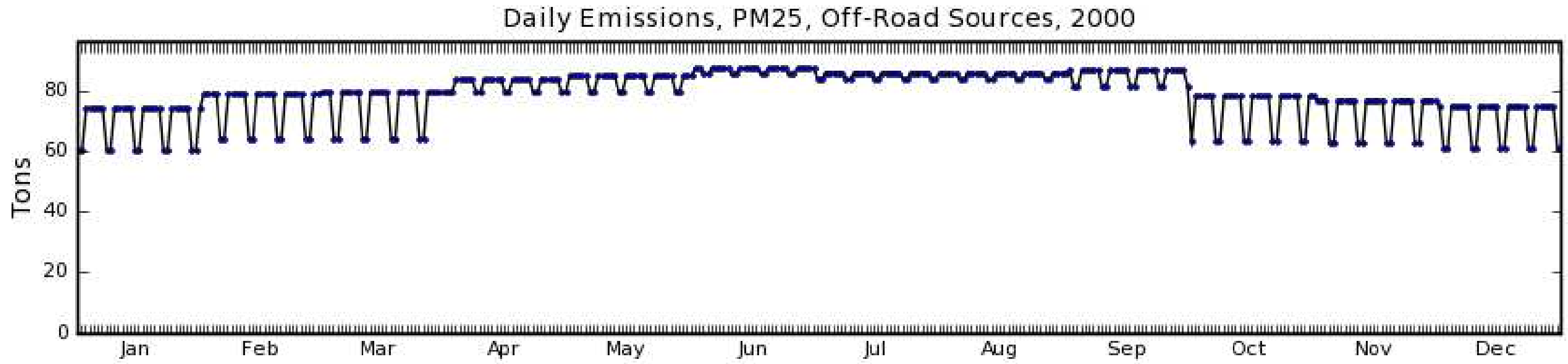

Daily Emissions, NOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.50. Daily Emissions of PM2.5 in 2000**




Daily Emissions, PM25, Area-wide Sources, 2000
Tons
0
100
200
300
400
500
600
700
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, PM25, On-Road Sources, 2000
Tons
0
10
20
30
40
50
60
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, PM25, Off-Road Sources, 2000
Tons
0
20
40
60
80
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

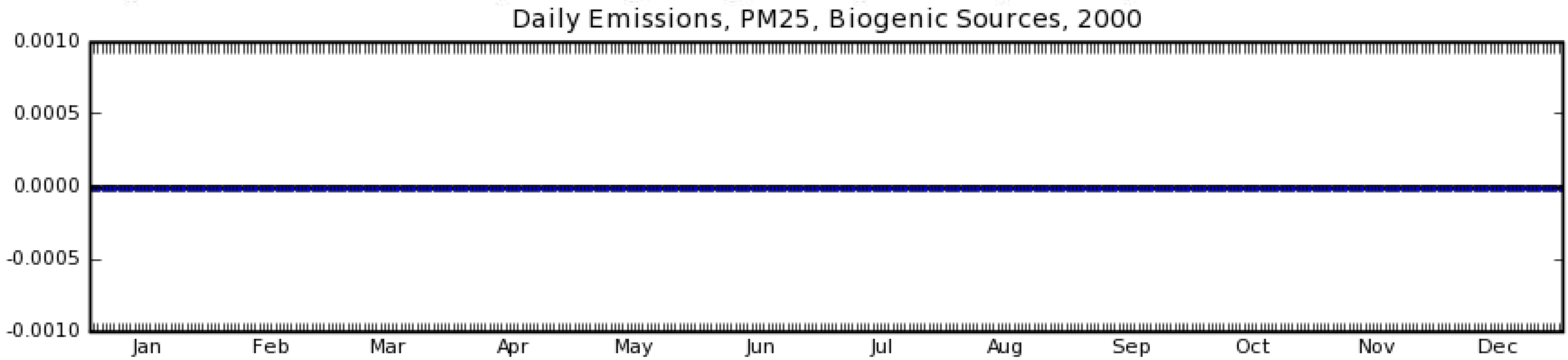
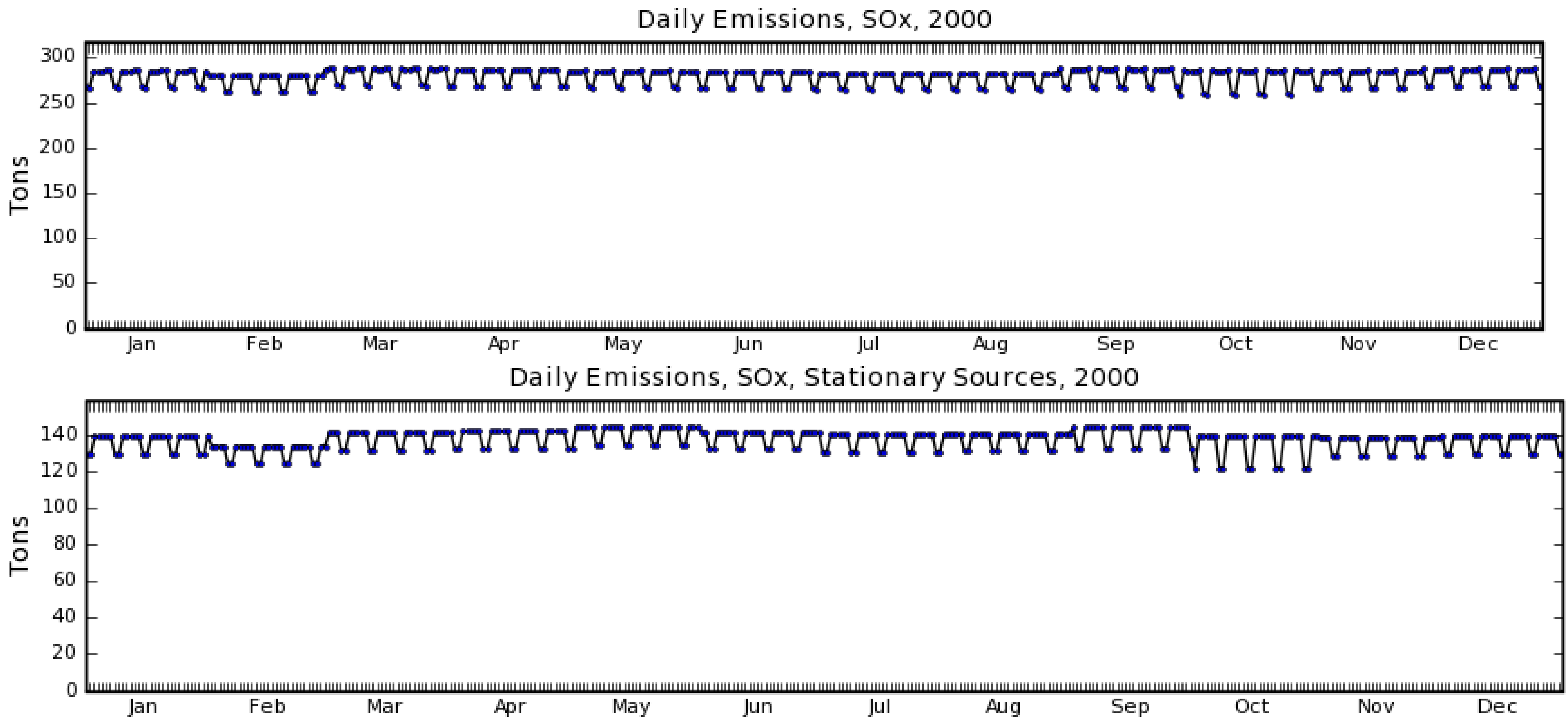
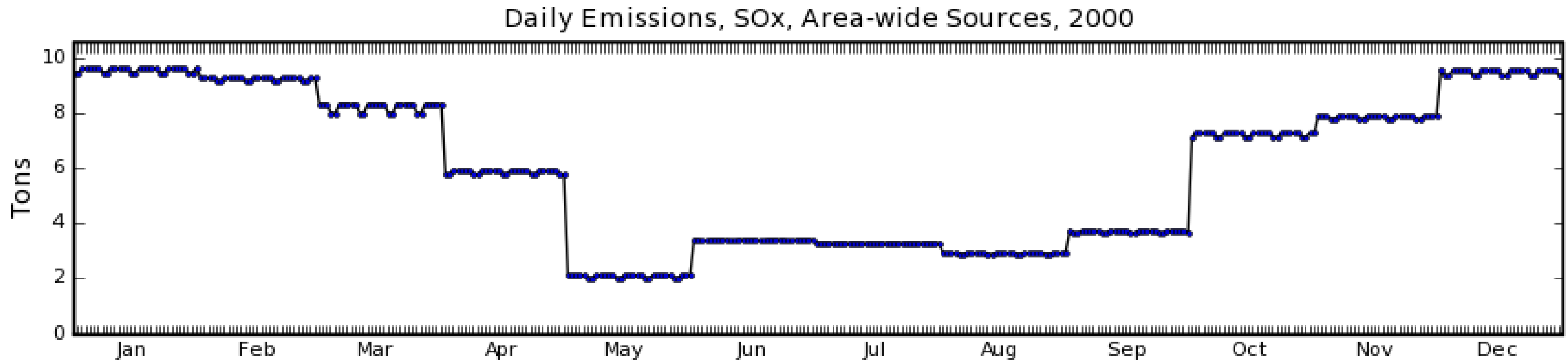
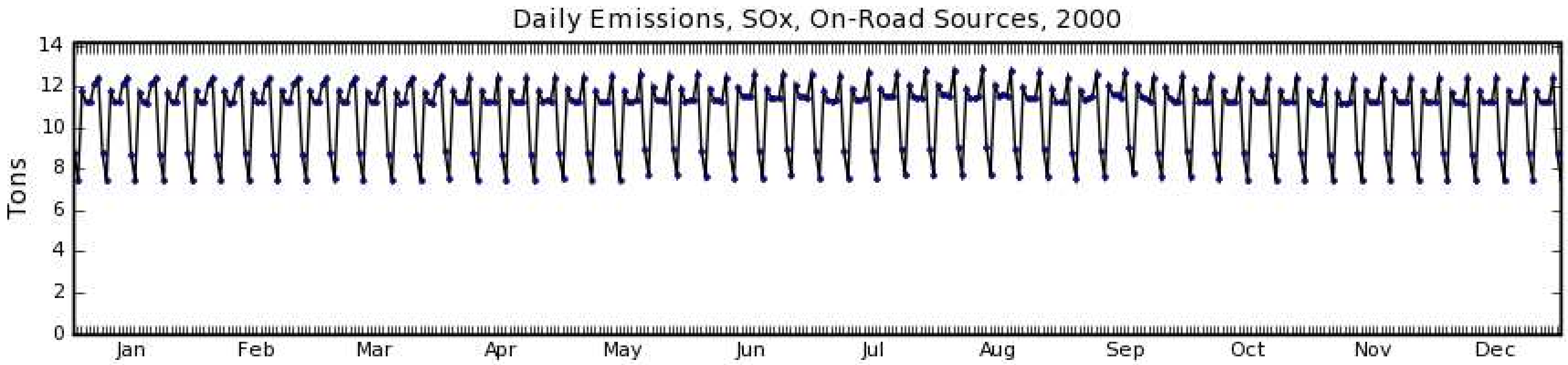
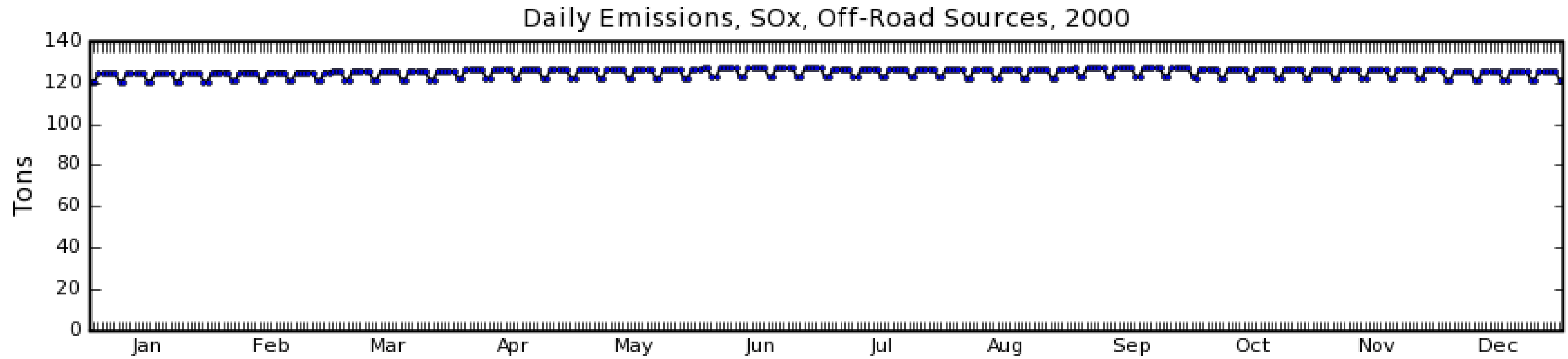

Daily Emissions, PM25, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.51. Daily Emissions of SOx in 2000**




Daily Emissions, SOx, Area-wide Sources, 2000
Tons
0
2
4
6
8
10
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, SOx, On-Road Sources, 2000
Tons
0
2
4
6
8
10
12
14
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, SOx, Off-Road Sources, 2000
Tons
140
120
100
80
60
40
20
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

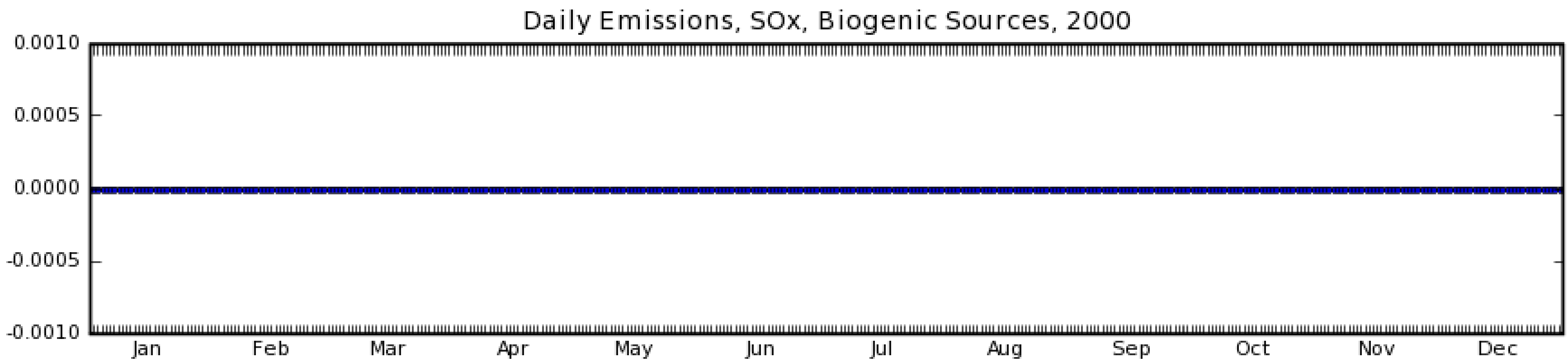
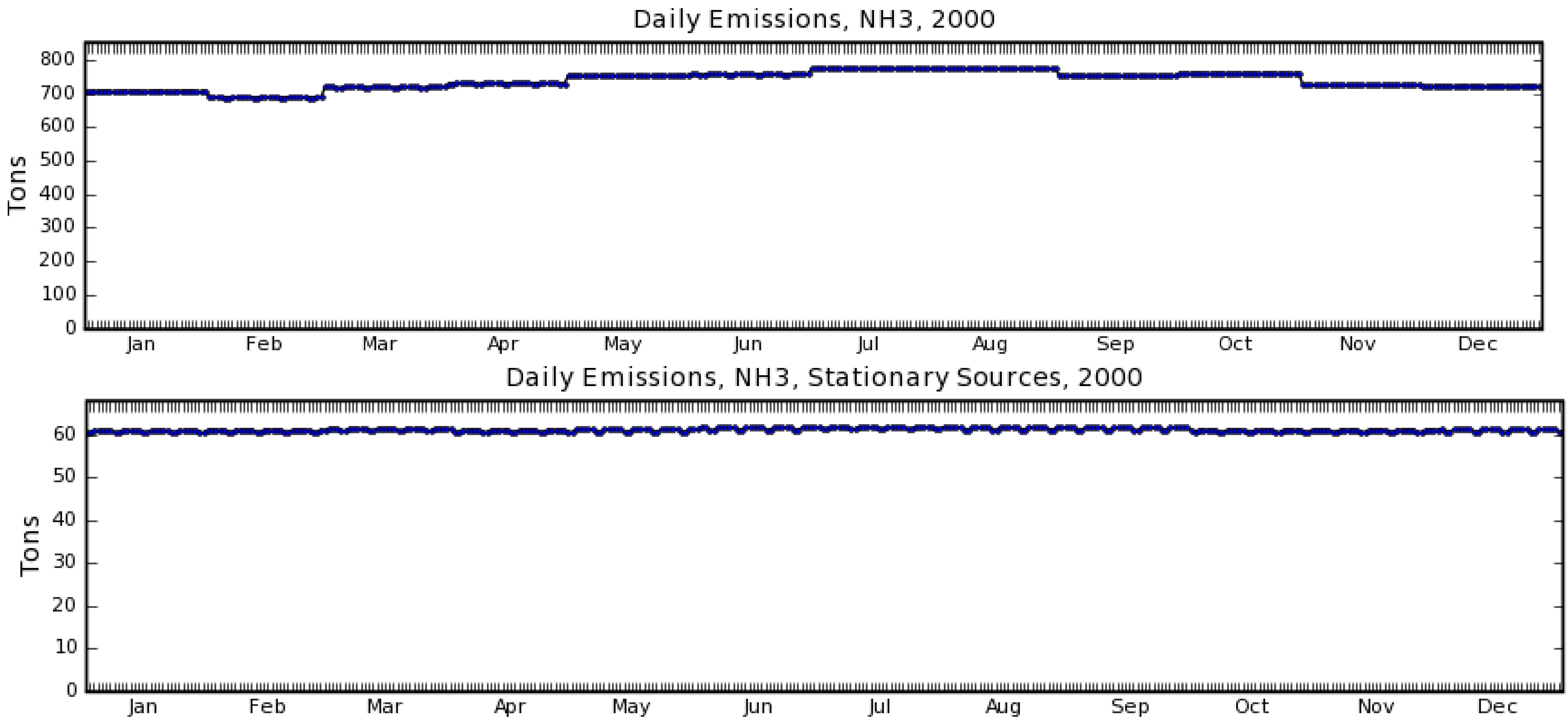
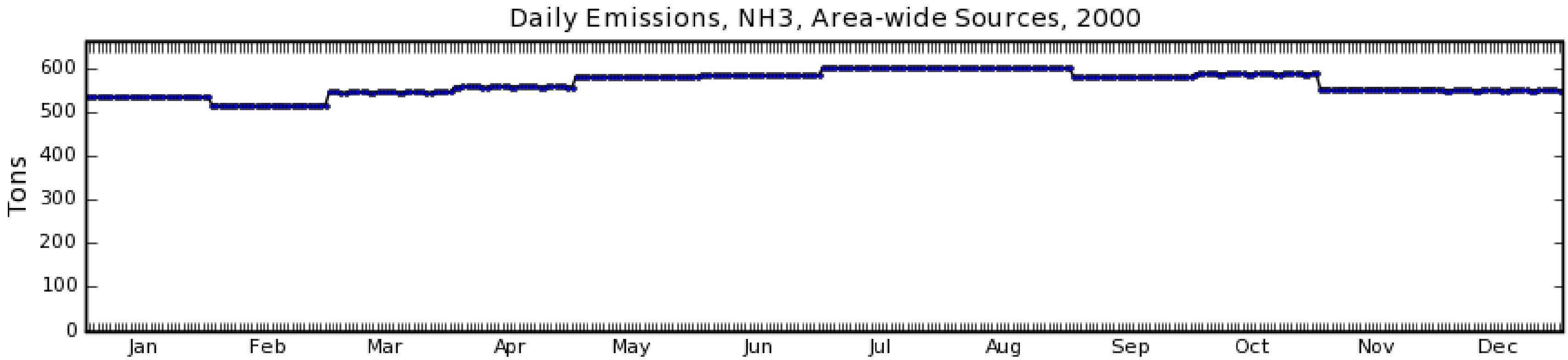
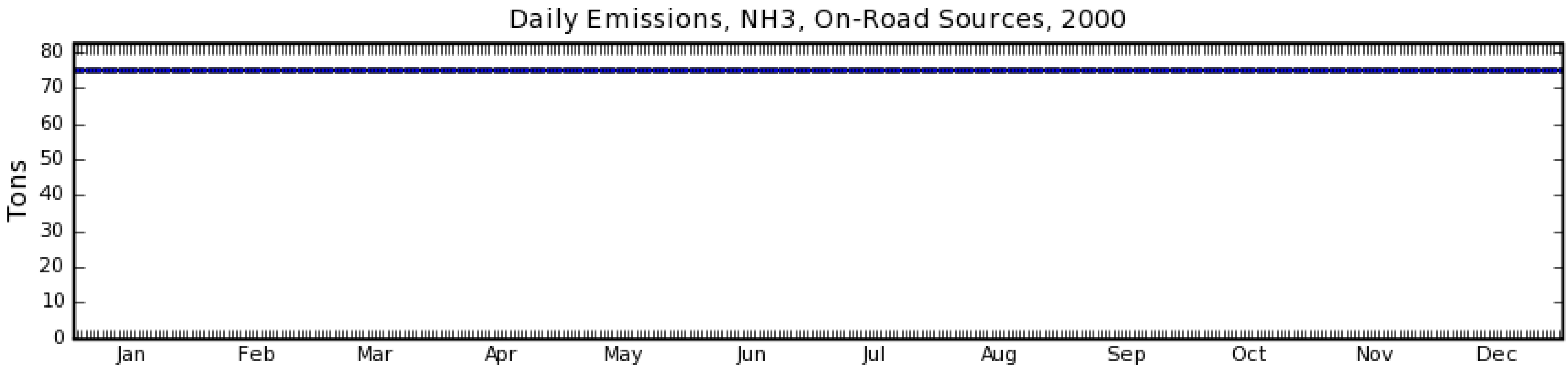
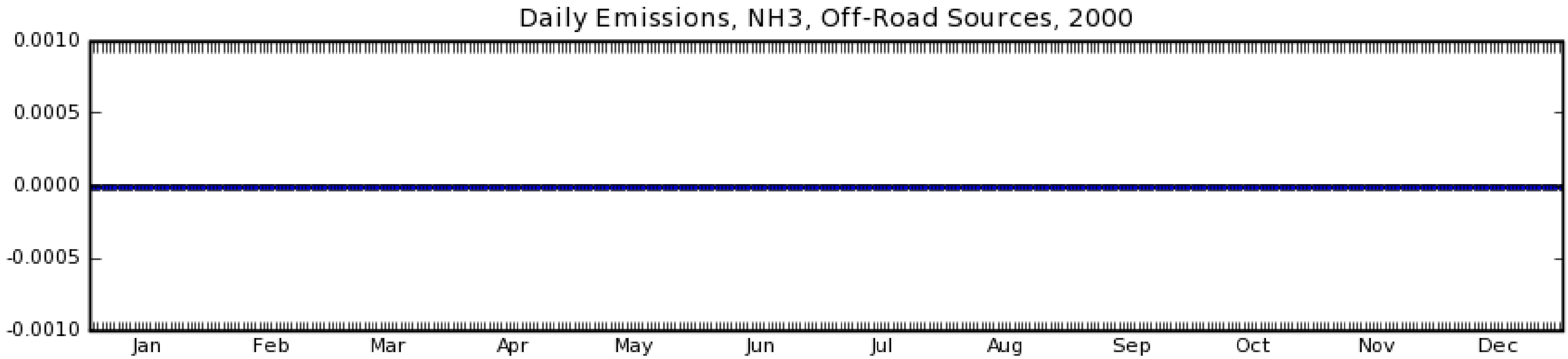

Daily Emissions, SOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.52. Daily Emissions of NH3 in 2000**




Daily Emissions, NH3, Area-wide Sources, 2000
Tons
600
500
400
300
200
100
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NH3, On-Road Sources, 2000
Tons
80
70
60
50
40
30
20
10
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NH3, Off-Road Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

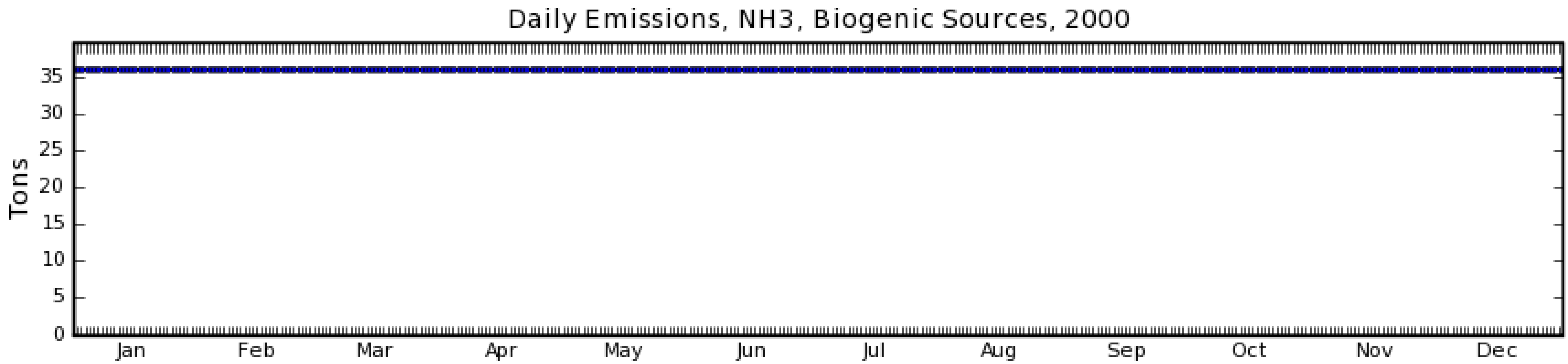
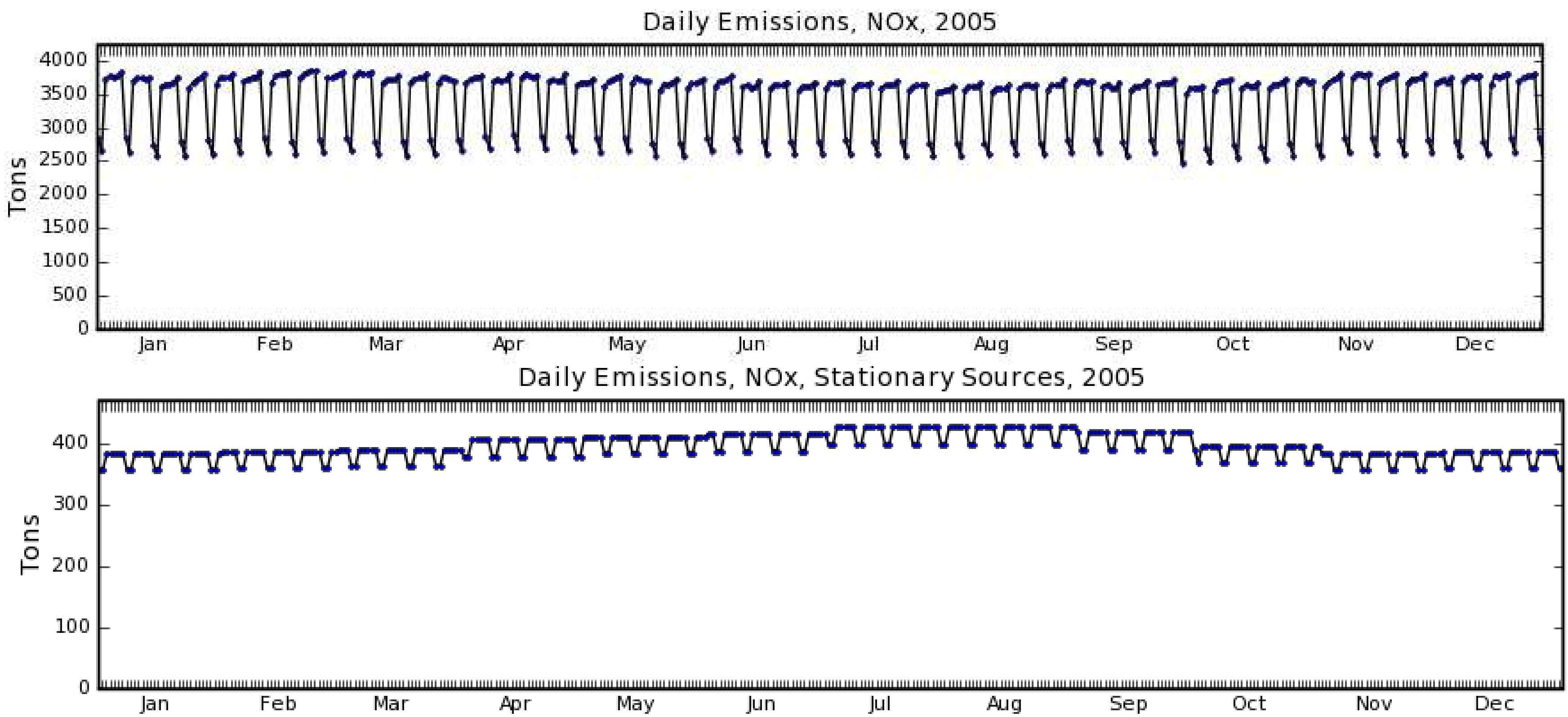
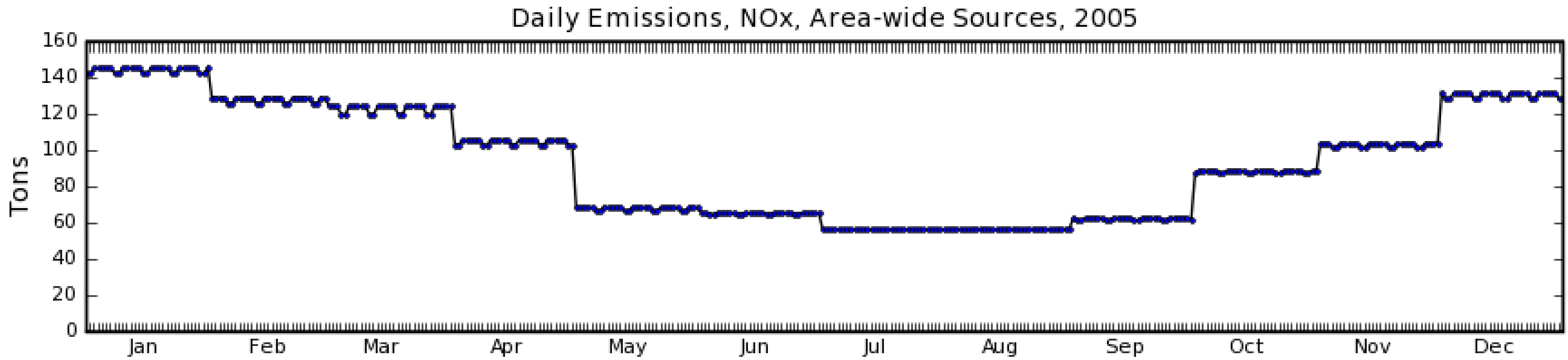
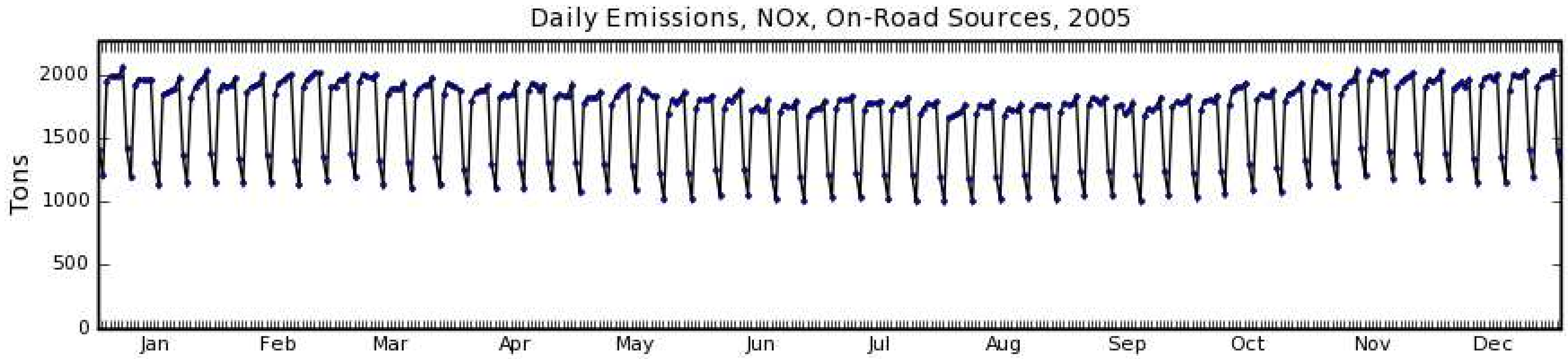
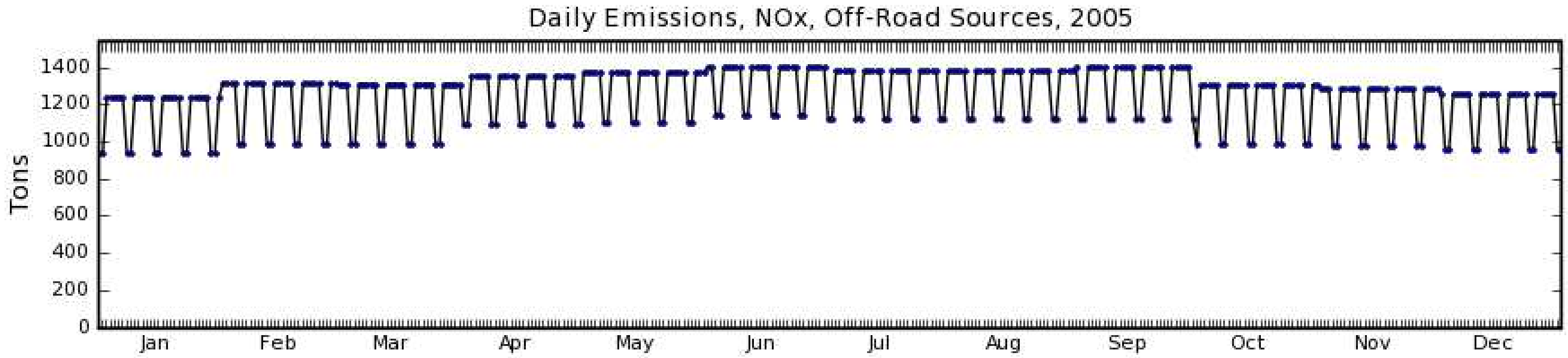

Daily Emissions, NH3, Biogenic Sources, 2000
Tons
35
30
25
20
15
10
5
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.53. Daily Emissions of NOx in 2005**




Daily Emissions, NOx, Area-wide Sources, 2005
Tons
160
140
120
100
80
60
40
20
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NOx, On-Road Sources, 2005
Tons
2000
1500
1000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NOx, Off-Road Sources, 2005
Tons
1400
1200
1000
800
600
400
200
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

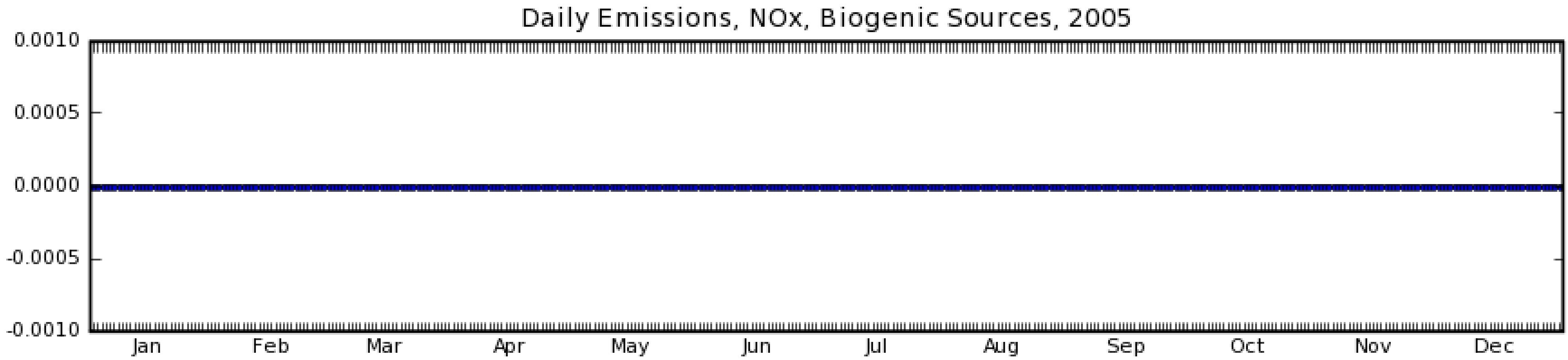
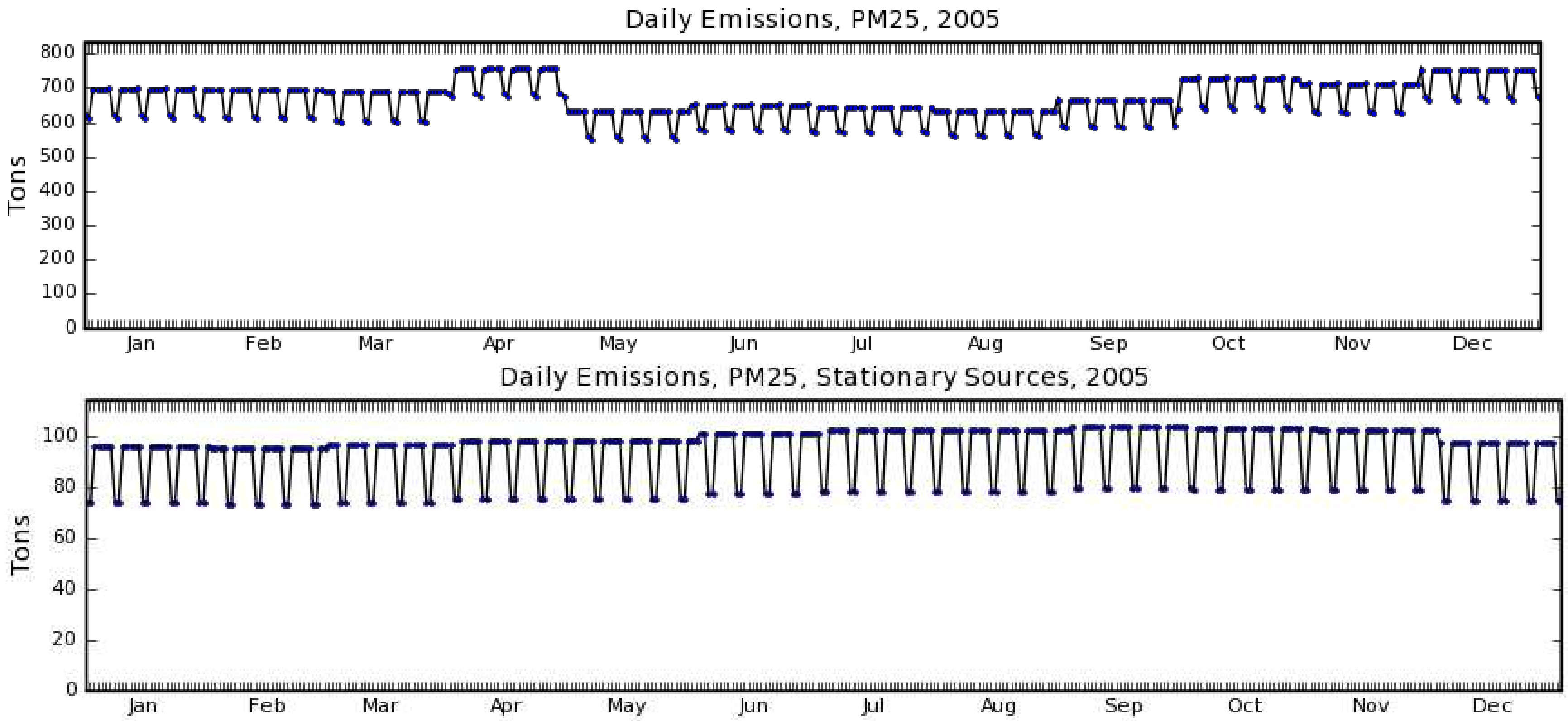
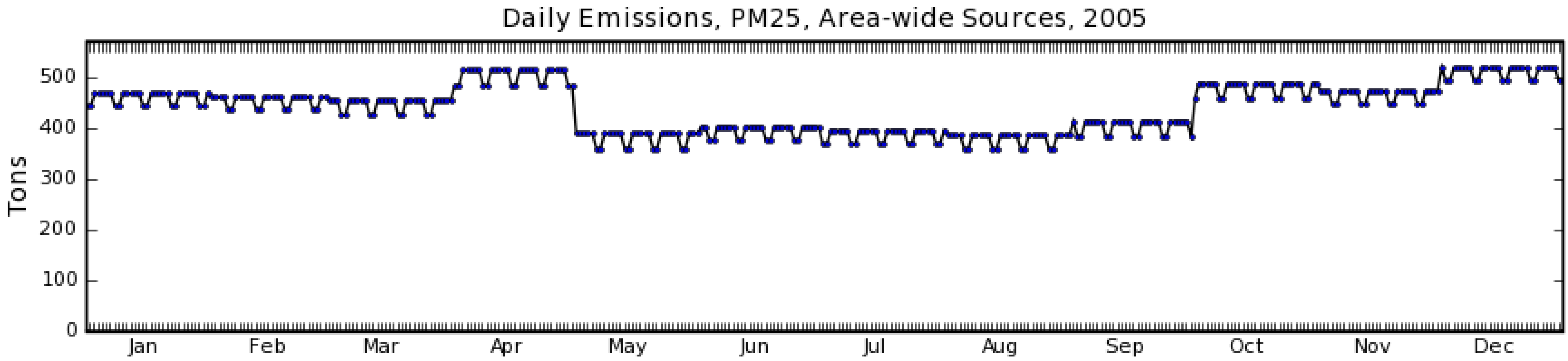
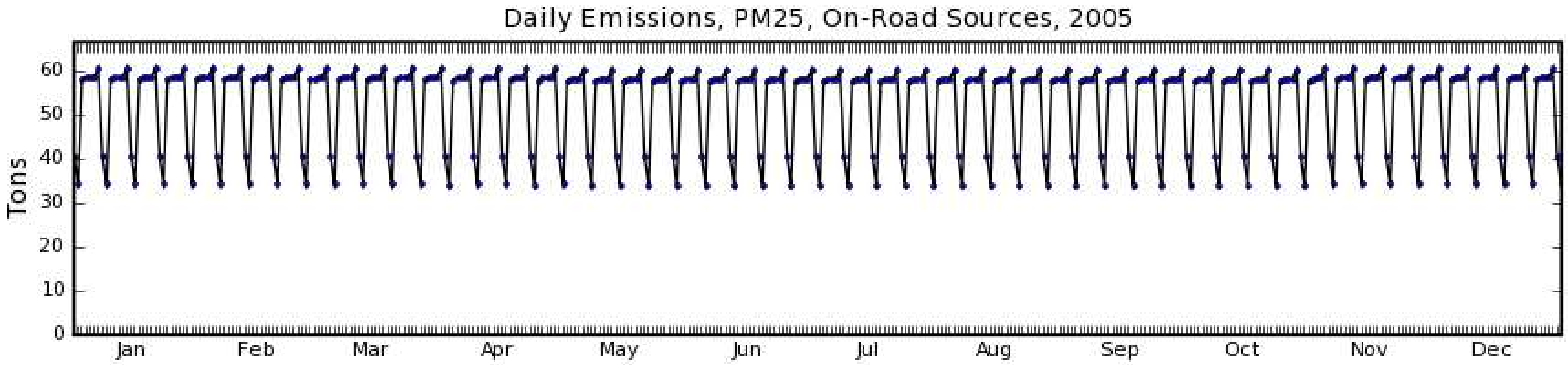

Daily Emissions, NOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.54. Daily Emissions of PM2.5 in 2005**

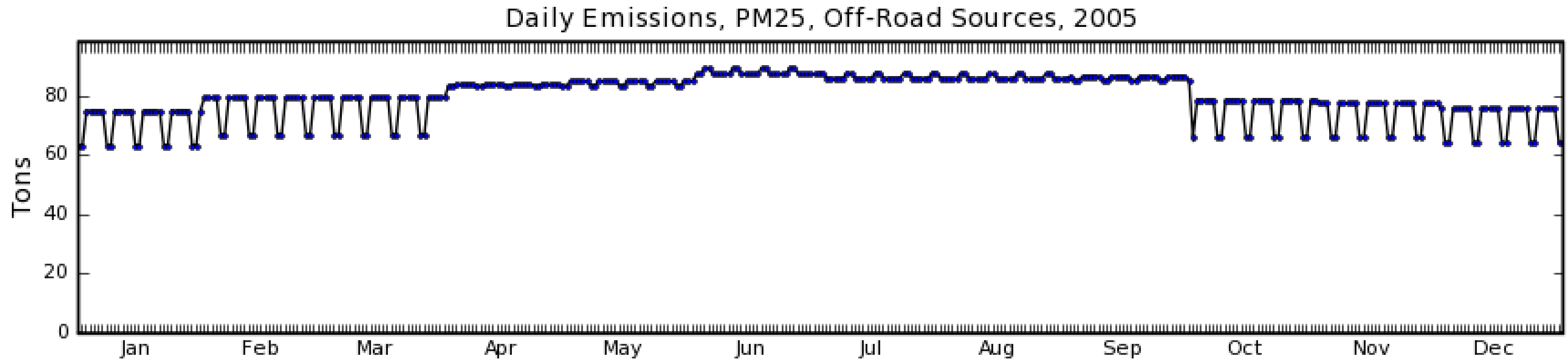




Daily Emissions, PM25, Area-wide Sources, 2005
Tons
0
100
200
300
400
500
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Daily Emissions, PM25, On-Road Sources, 2005
Tons
0
10
20
30
40
50
60
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, PM25, Off-Road Sources, 2005
Tons
0
20
40
60
80
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

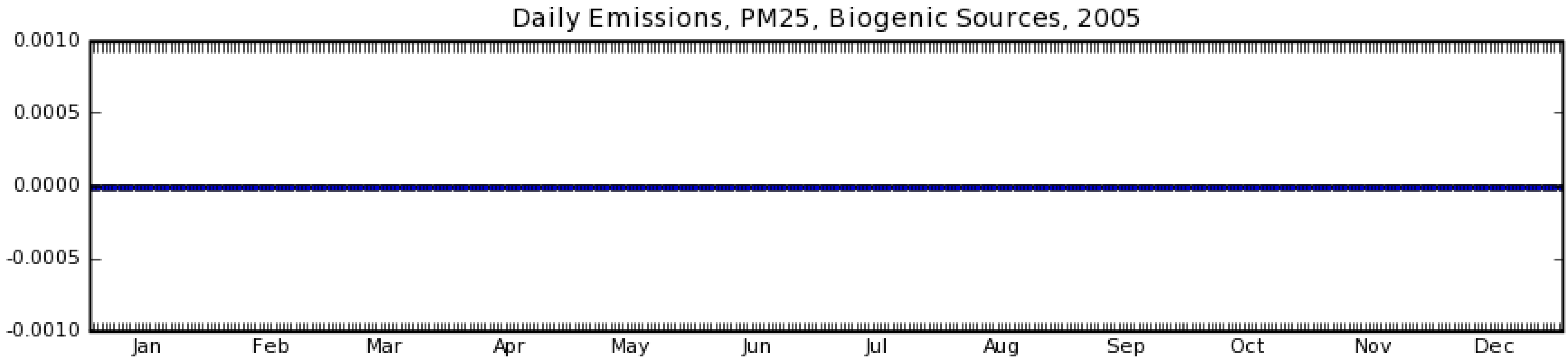
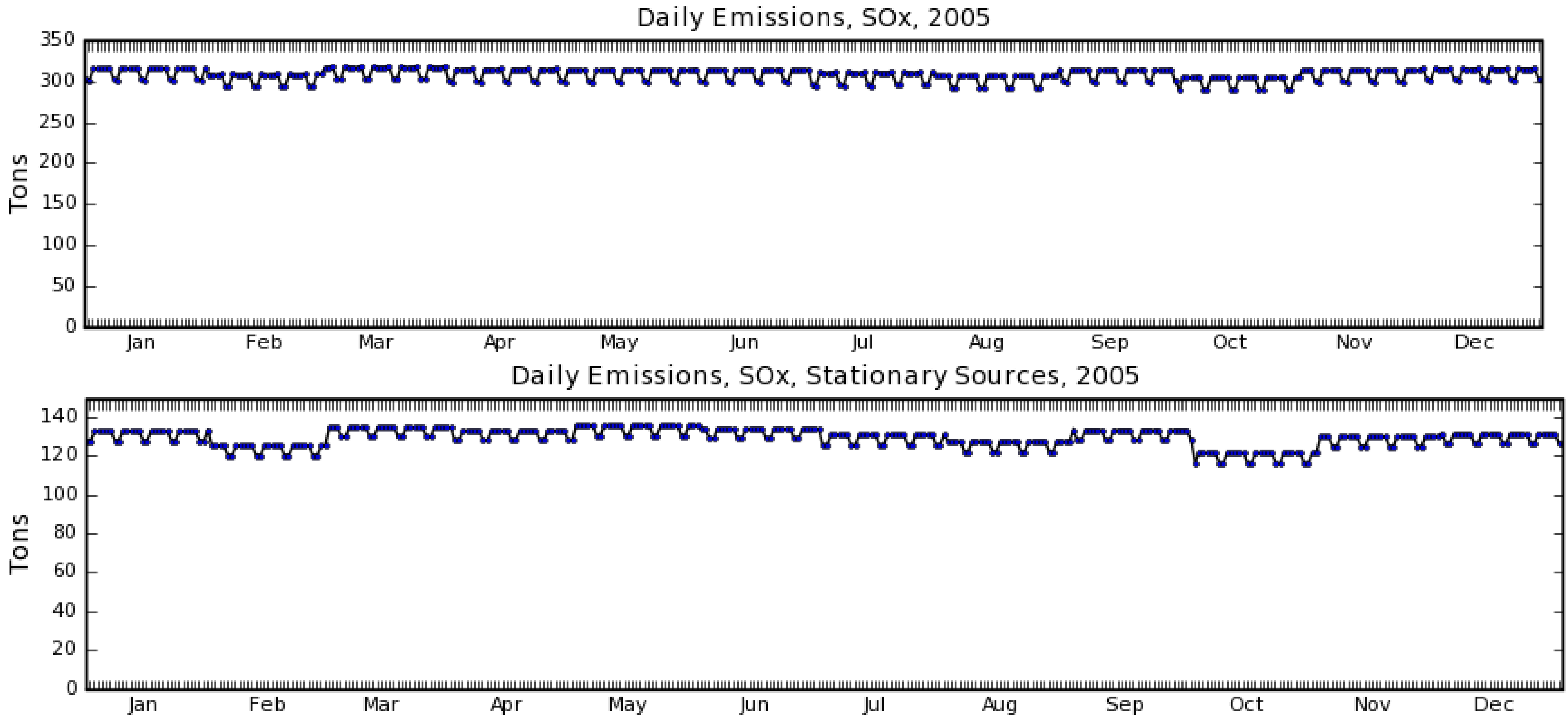
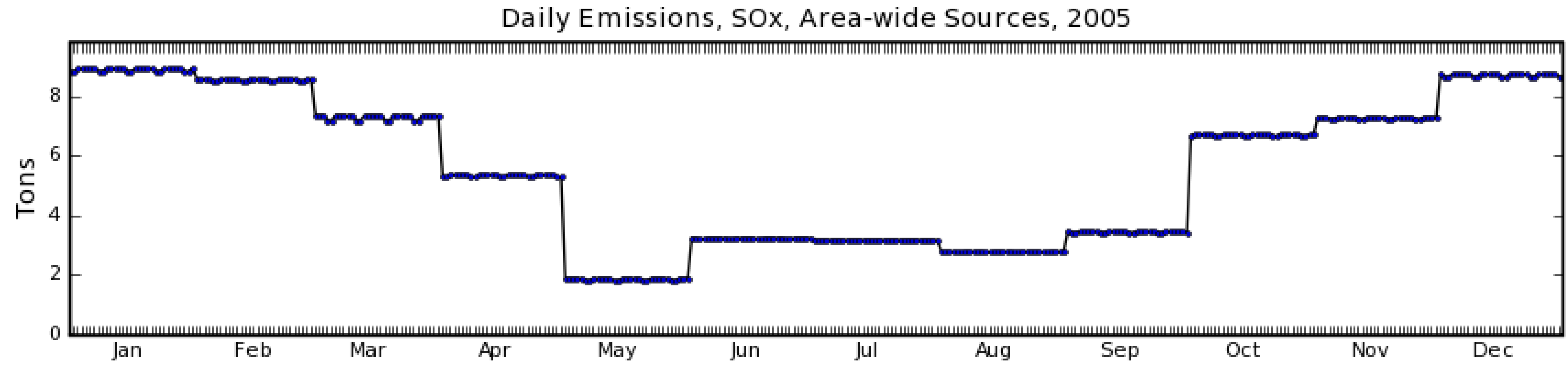
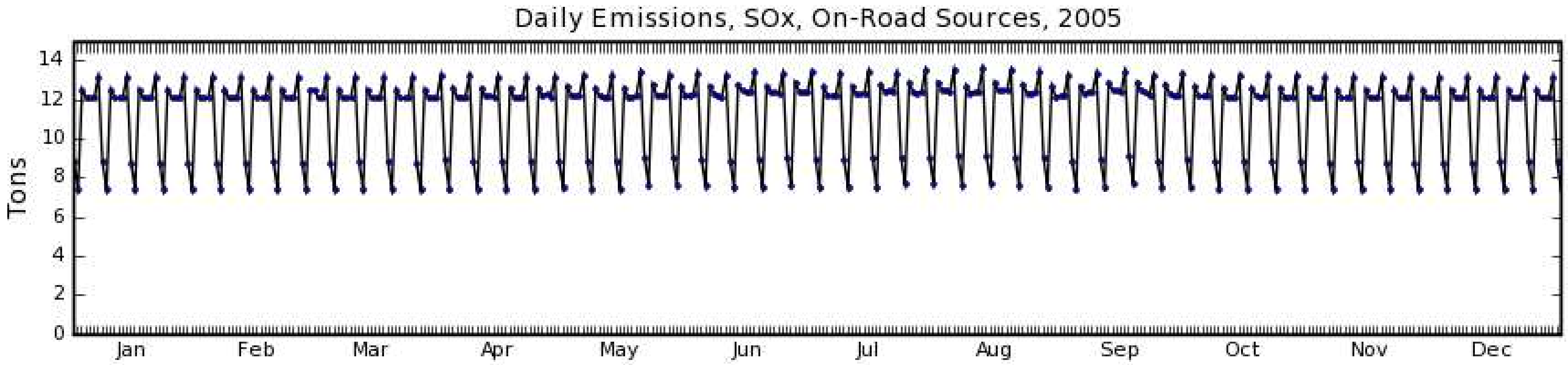

Daily Emissions, PM25, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.55. Daily Emissions of SOx in 2005**

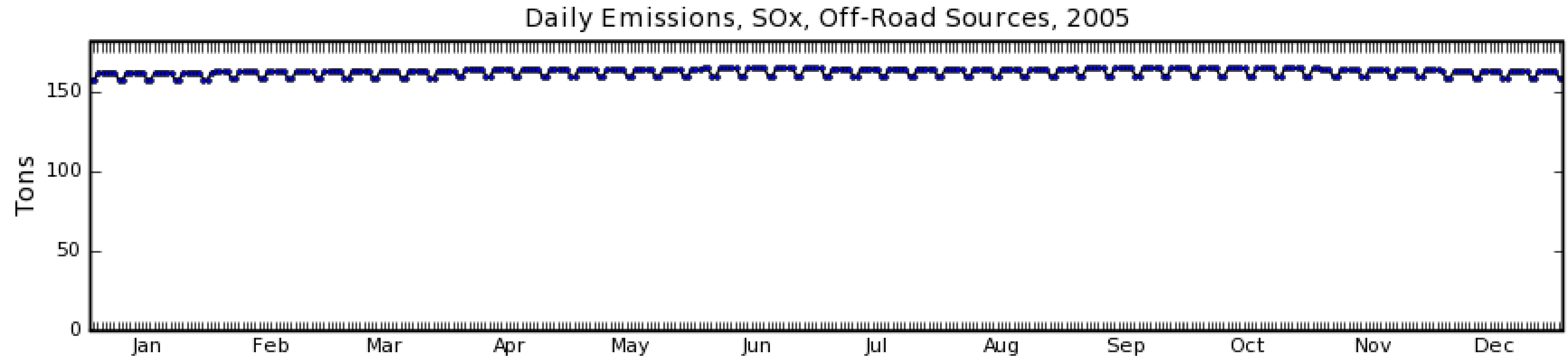




Daily Emissions, SOx, Area-wide Sources, 2005
Tons
0
2
4
6
8
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Daily Emissions, SOx, On-Road Sources, 2005
Tons
0
2
4
6
8
10
12
14
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, SOx, Off-Road Sources, 2005
Tons
150
100
50
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

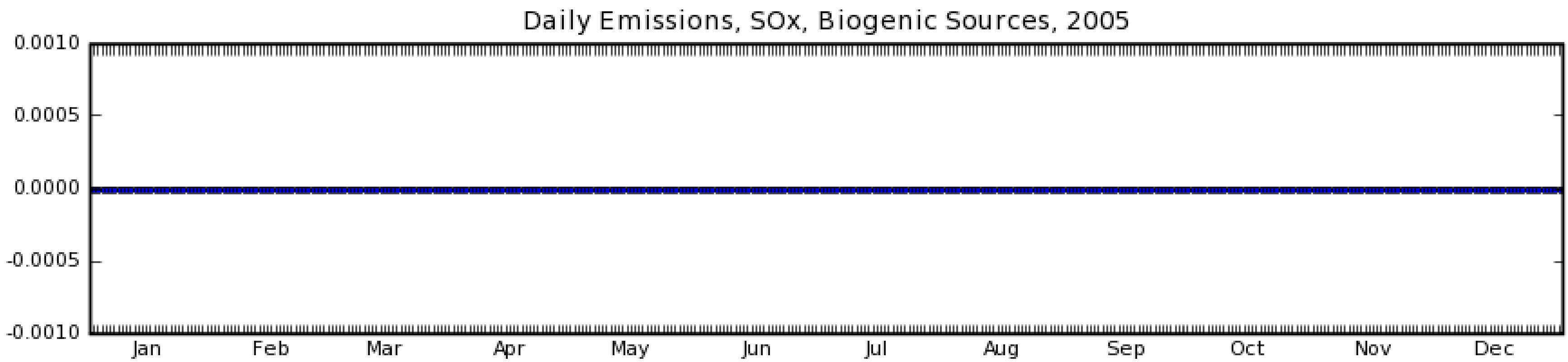
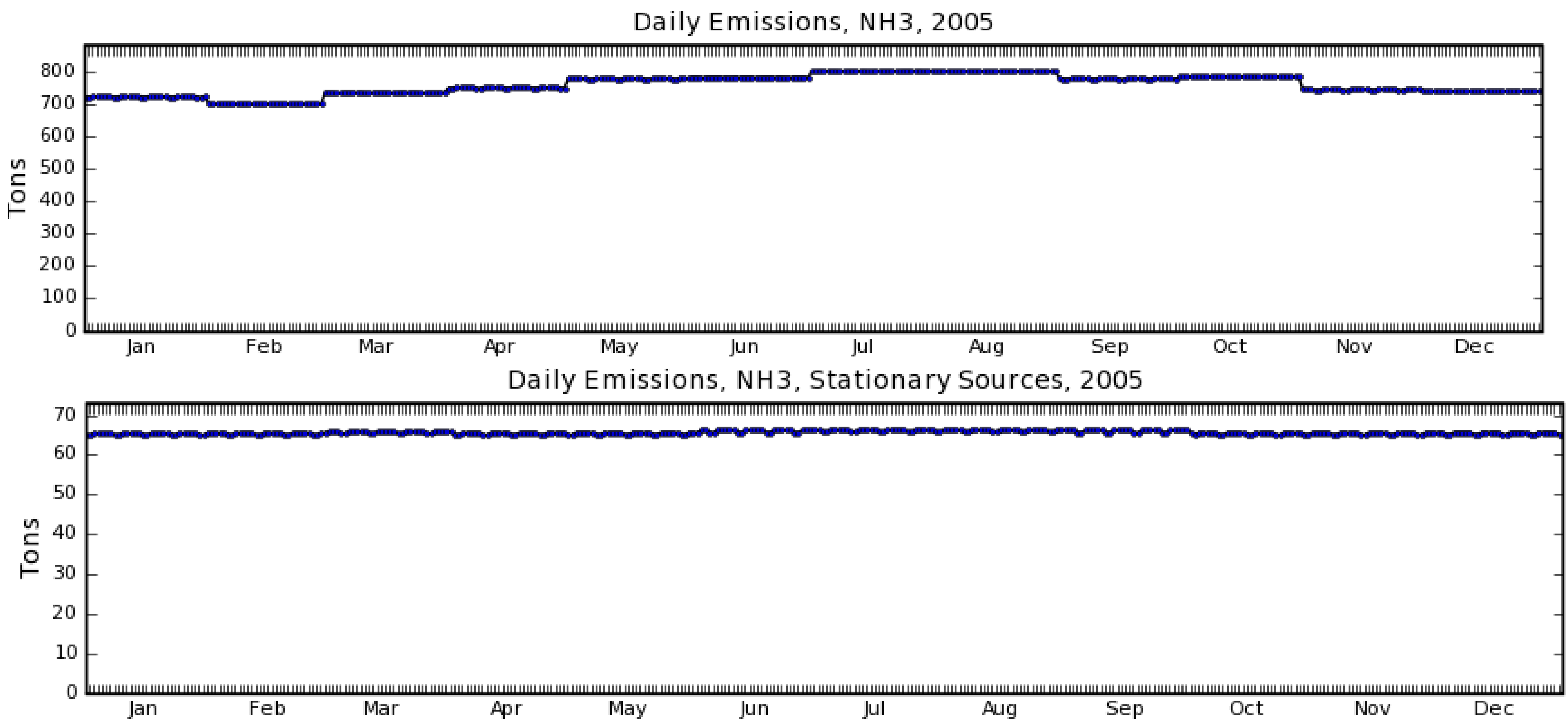
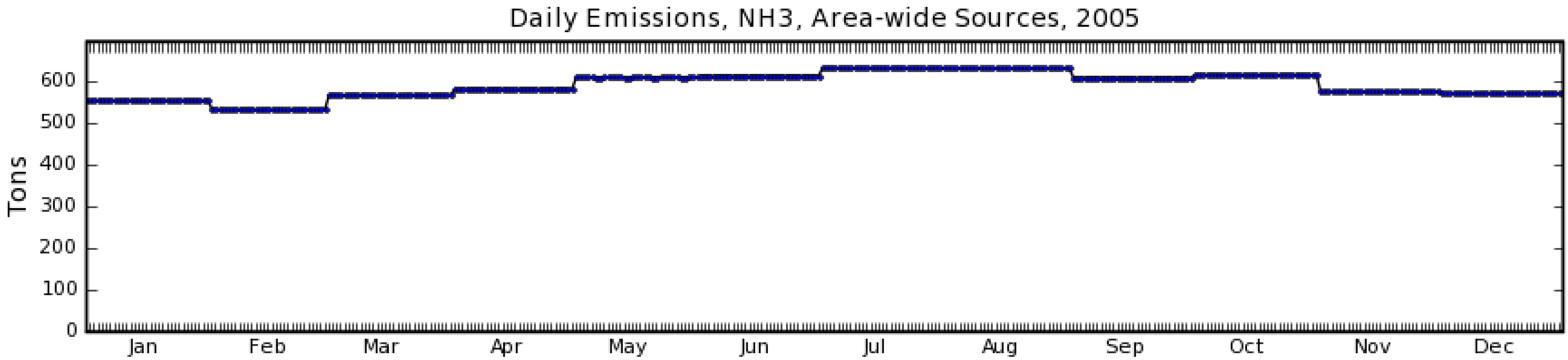
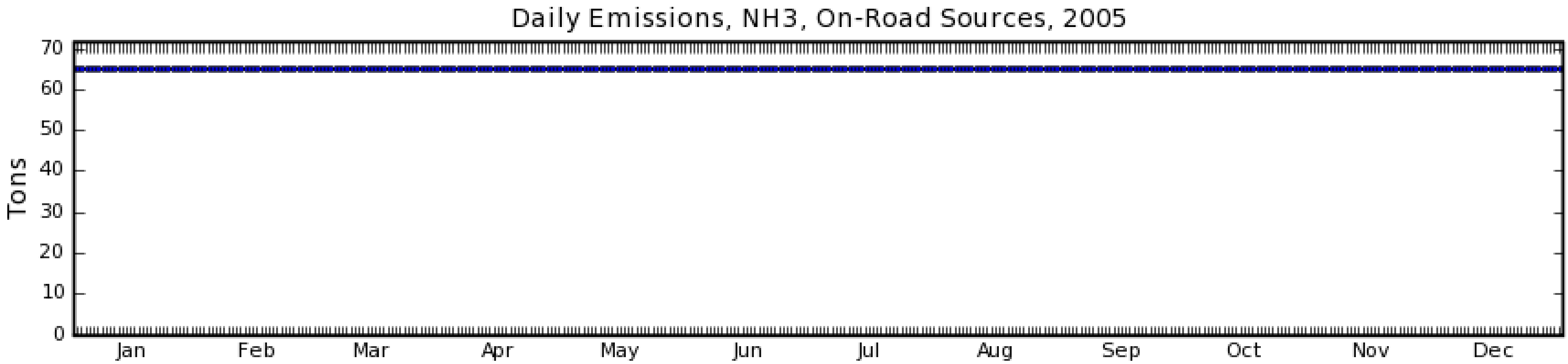
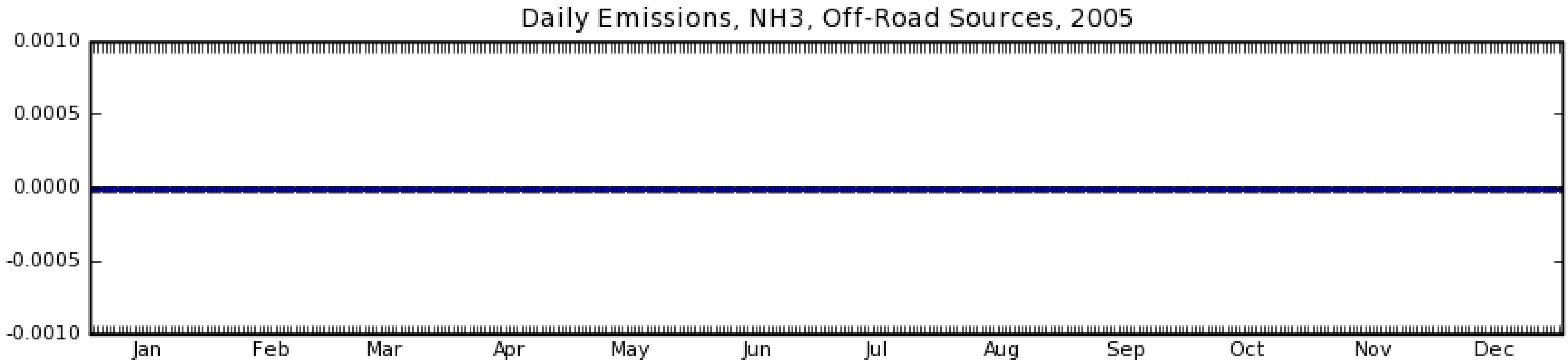

Daily Emissions, SOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.56. Daily Emissions of NH3 in 2005**




Daily Emissions, NH3, Area-wide Sources, 2005
Tons
0
100
200
300
400
500
600
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NH3, On-Road Sources, 2005
Tons
0
10
20
30
40
50
60
70
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NH3, Off-Road Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

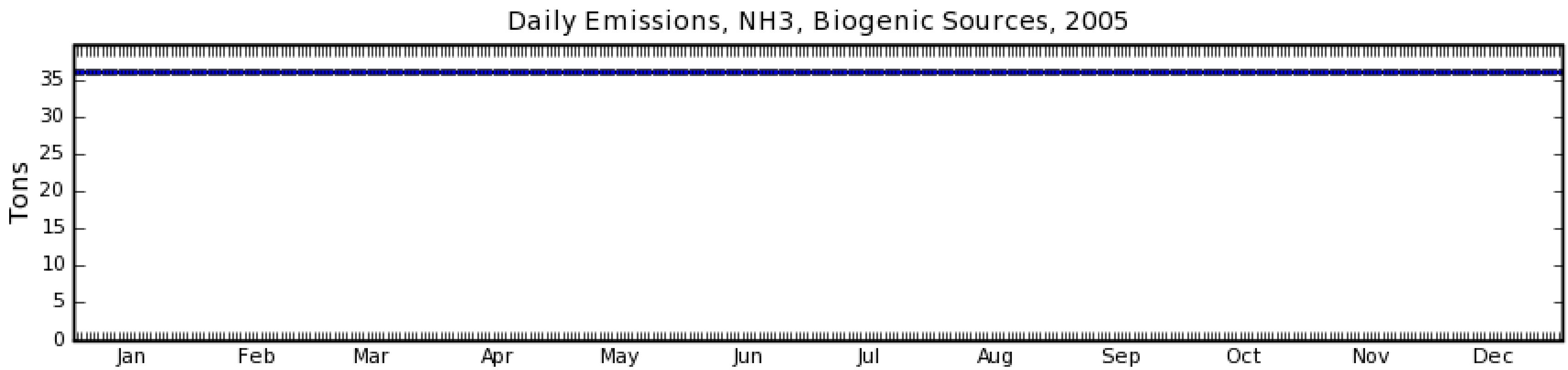
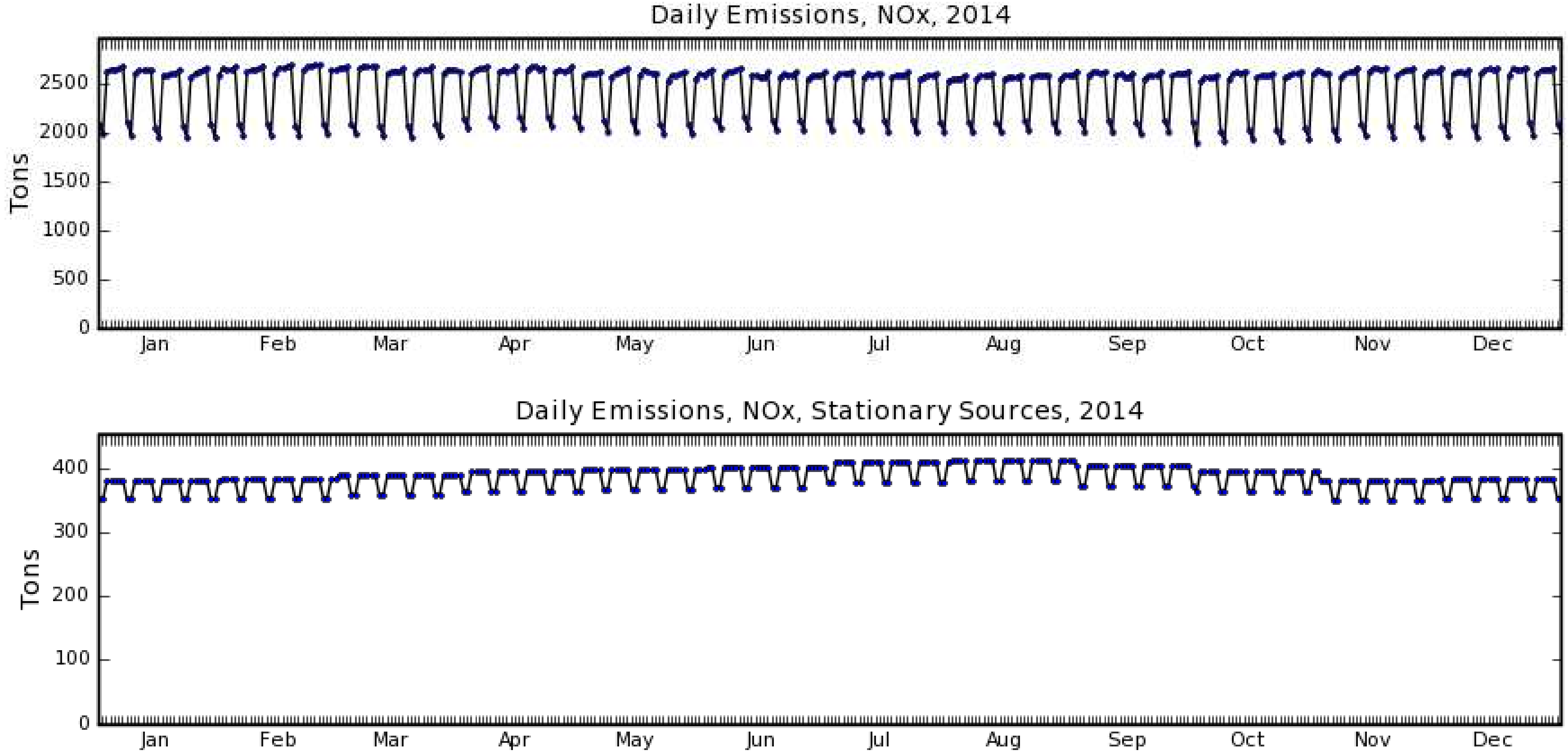
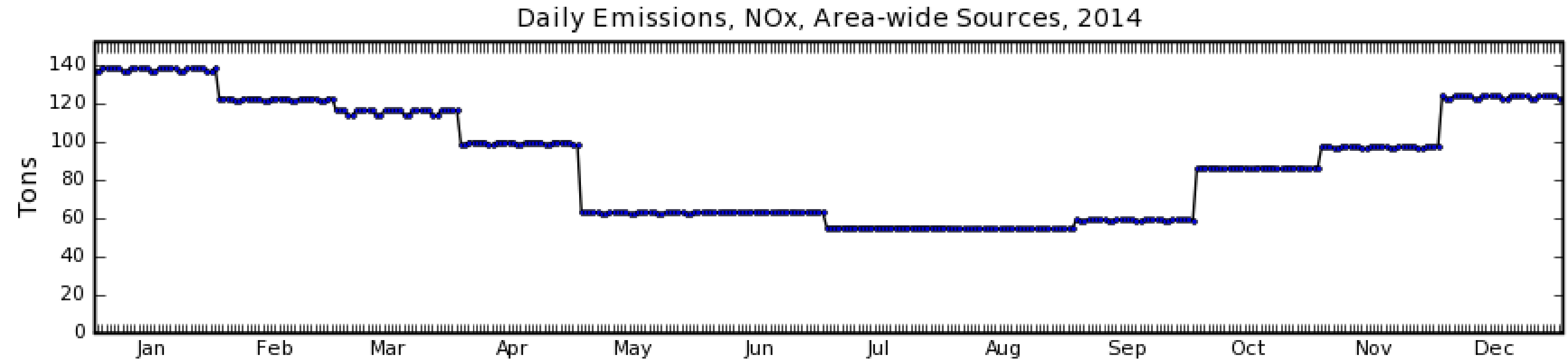
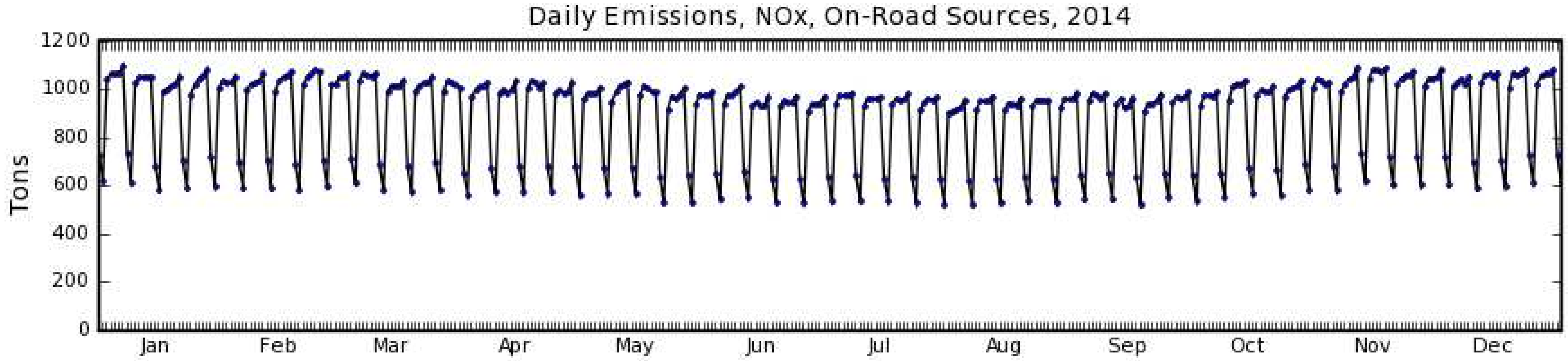
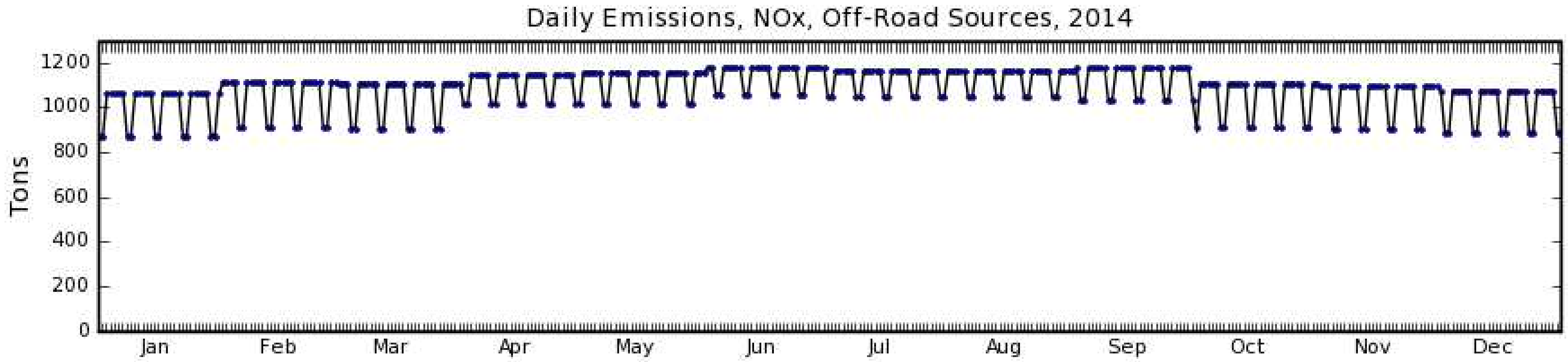

Daily Emissions, NH3, Biogenic Sources, 2005
Tons
35
30
25
20
15
10
5
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.57. Daily Emissions of NOx in 2014**




Daily Emissions, NOx, Area-wide Sources, 2014
Tons
0
20
40
60
80
100
120
140
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NOx, On-Road Sources, 2014
Tons
0
200
400
600
800
1000
1200
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NOx, Off-Road Sources, 2014
Tons
0
200
400
600
800
1000
1200
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

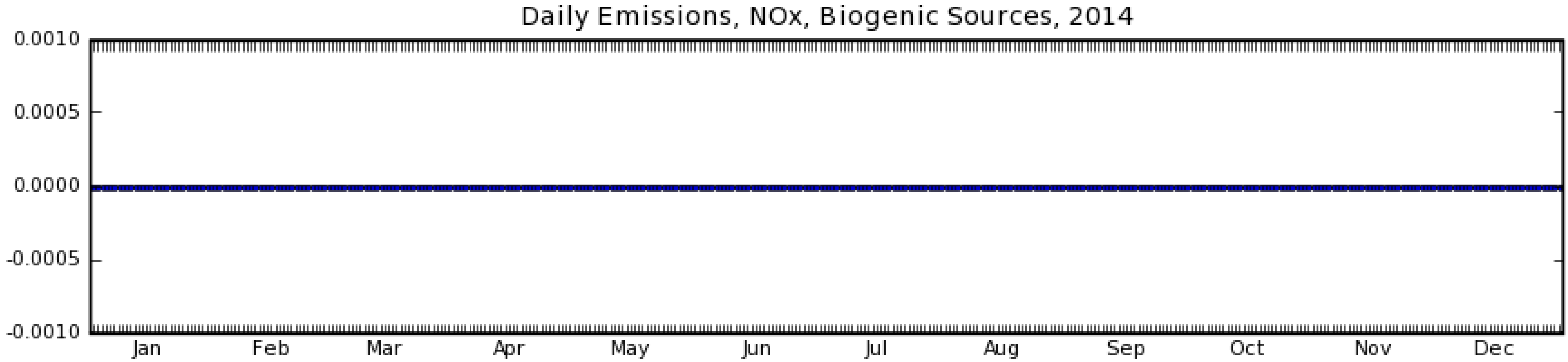
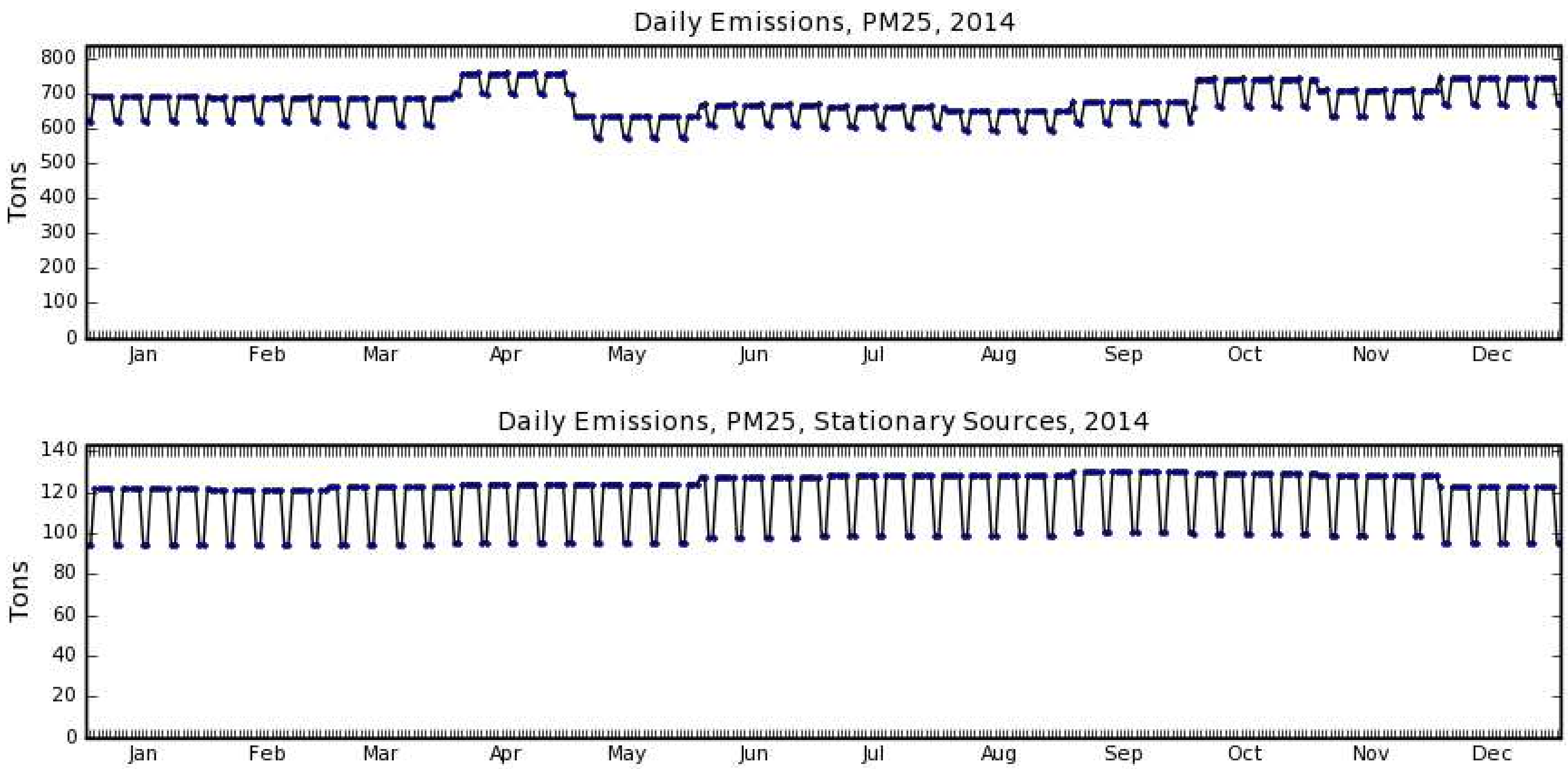
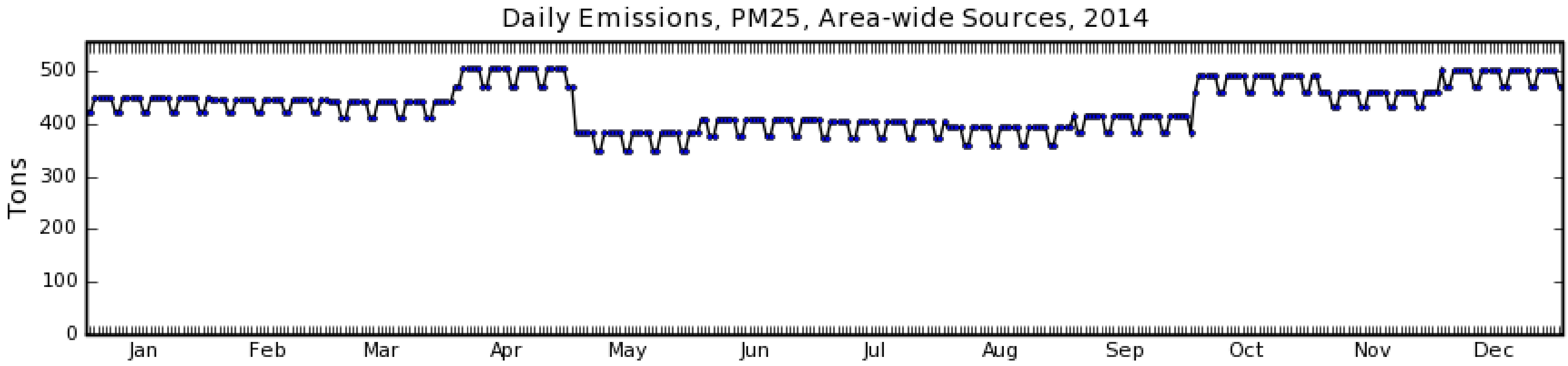
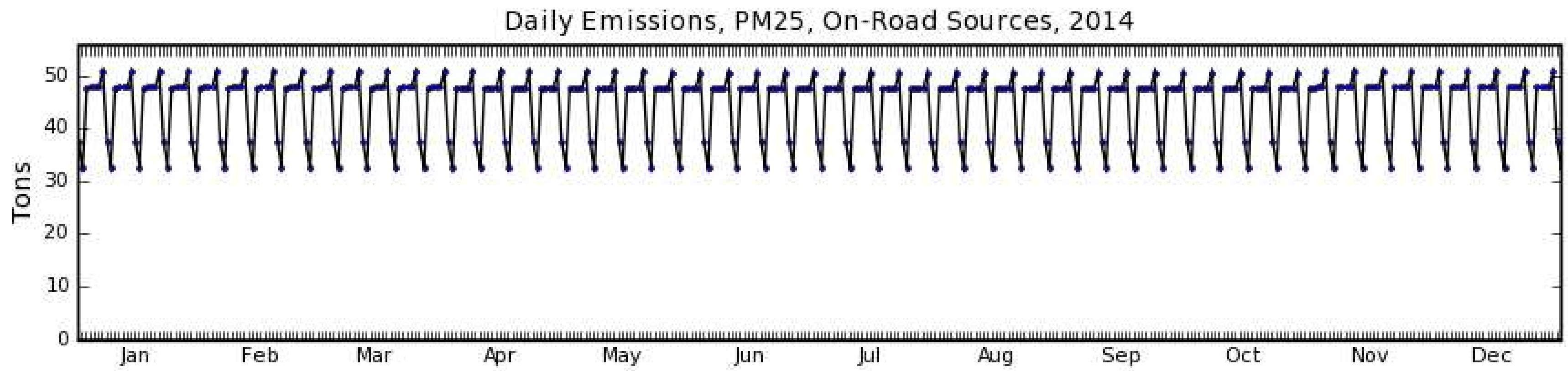
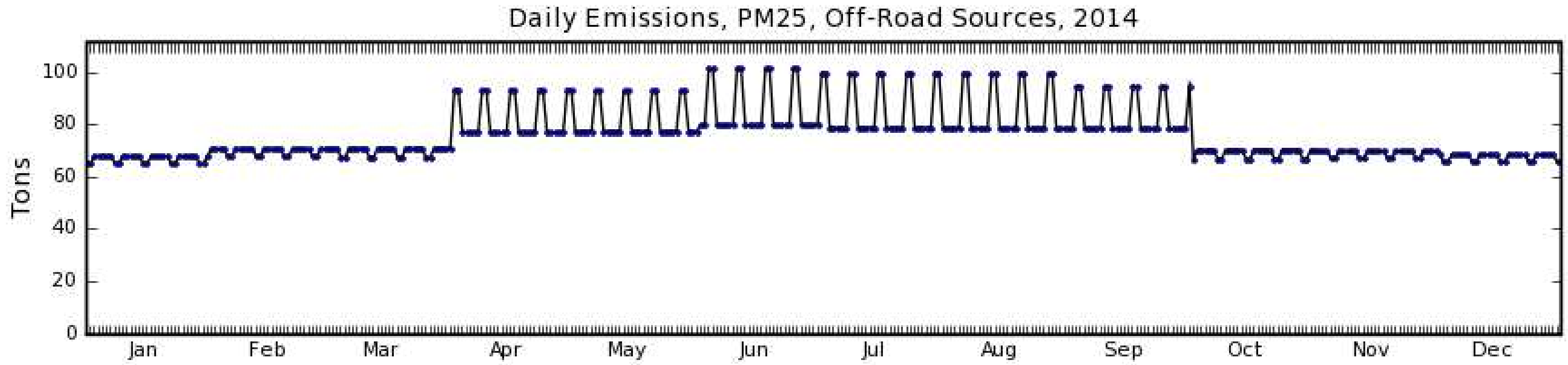

Daily Emissions, NOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.58. Daily Emissions of PM2.5 in 2014**




Daily Emissions, PM25, Area-wide Sources, 2014
Tons
0
100
200
300
400
500
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, PM25, On-Road Sources, 2014
Tons
0
10
20
30
40
50
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, PM25, Off-Road Sources, 2014
Tons
0
20
40
60
80
100
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

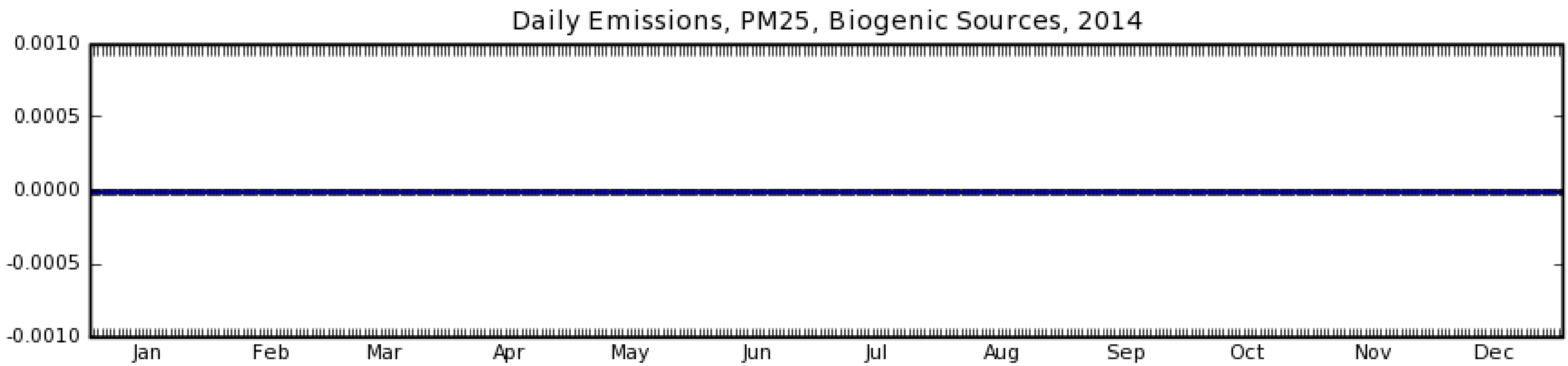
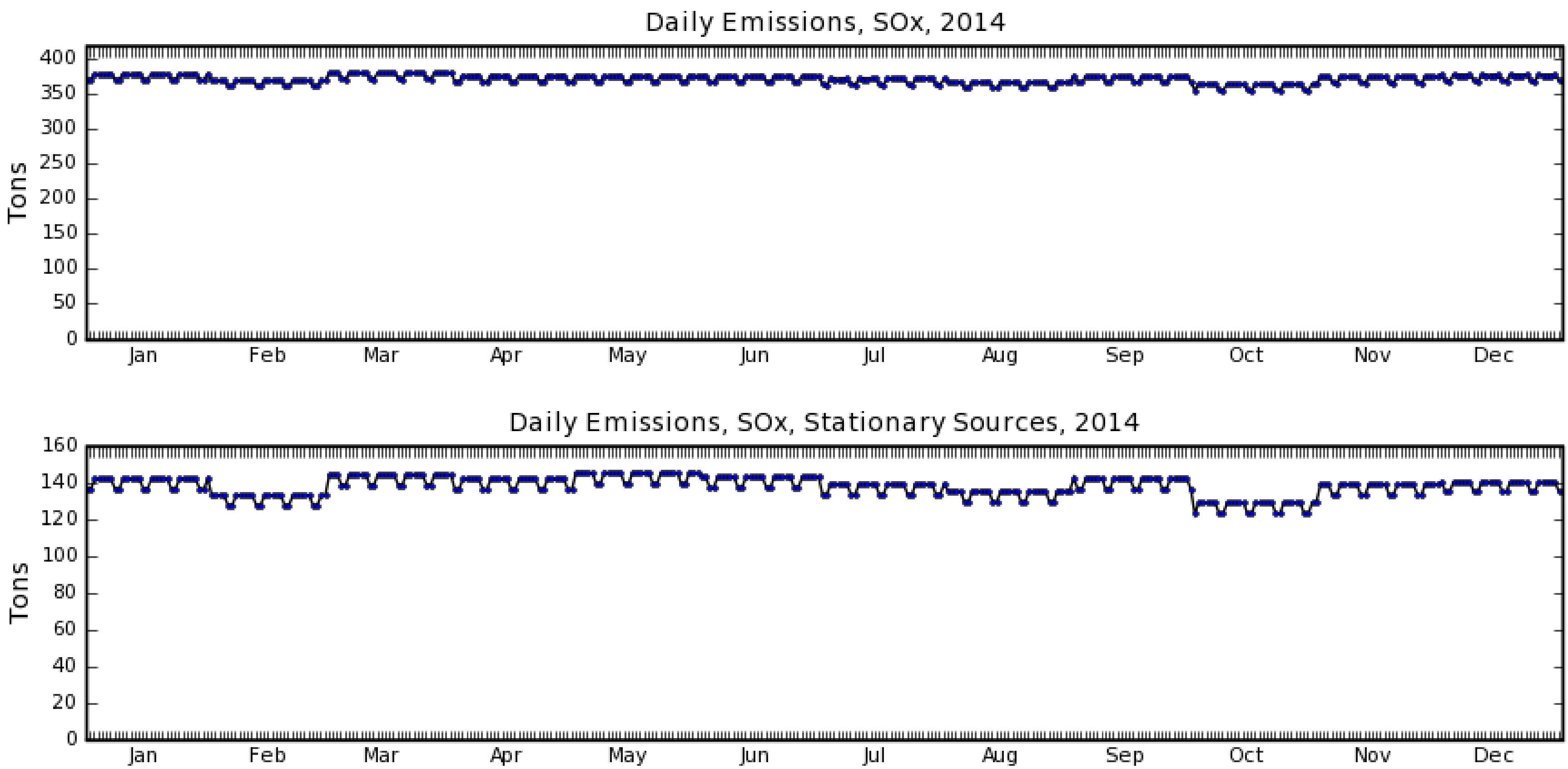
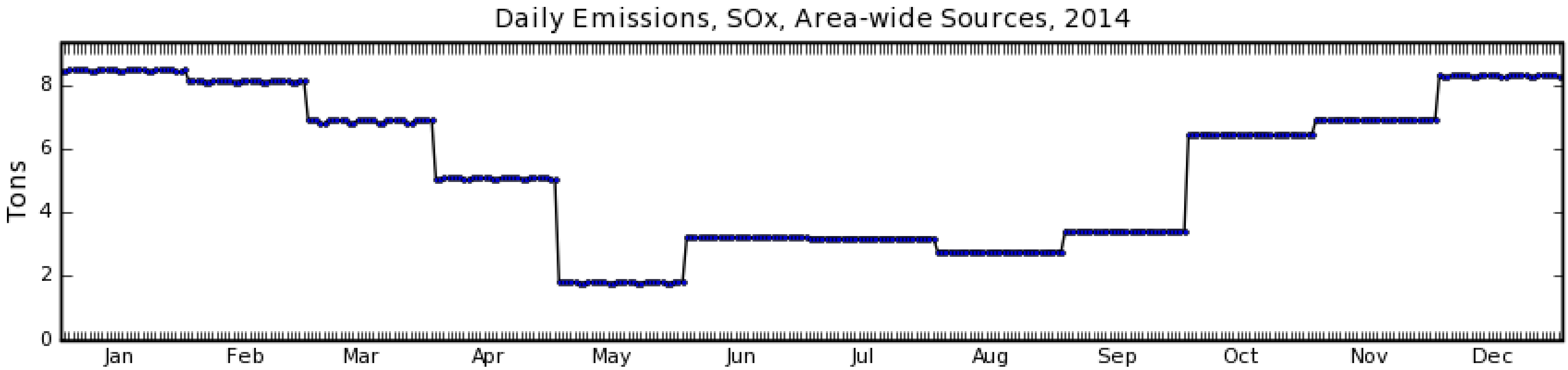
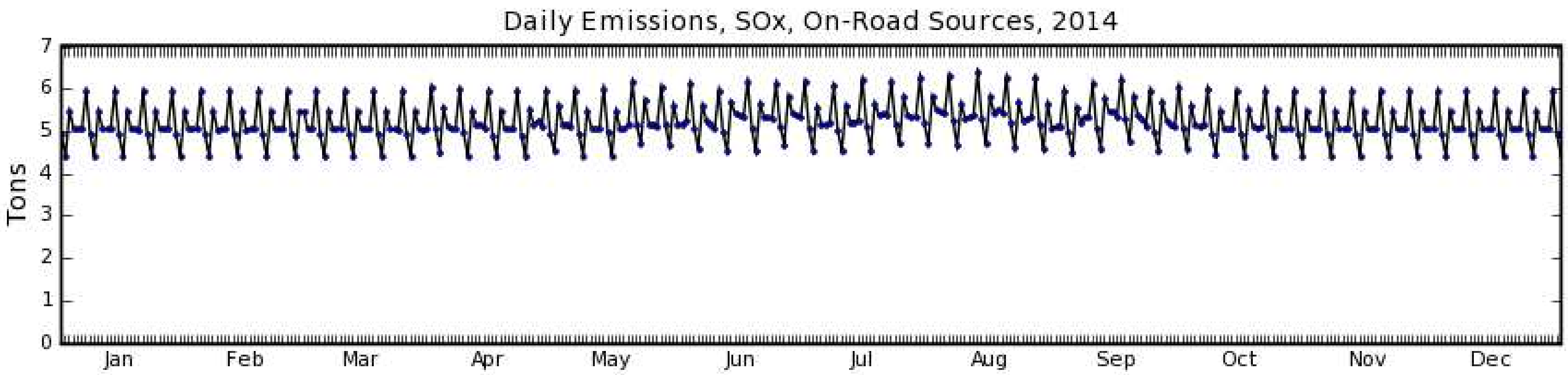

Daily Emissions, PM25, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

**Figure 3.59. Daily Emissions of SOx in 2014**

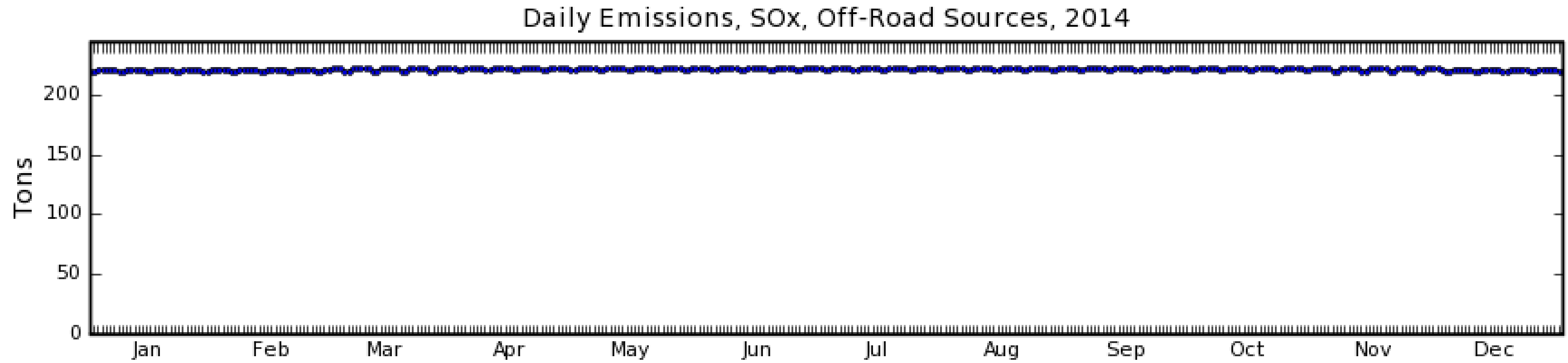




Daily Emissions, SOx, Area-wide Sources, 2014
Tons
0
2
4
6
8
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Daily Emissions, SOx, On-Road Sources, 2014
Tons
0
1
2
3
4
5
6
7
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, SOx, Off-Road Sources, 2014
Tons
0
50
100
150
200
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

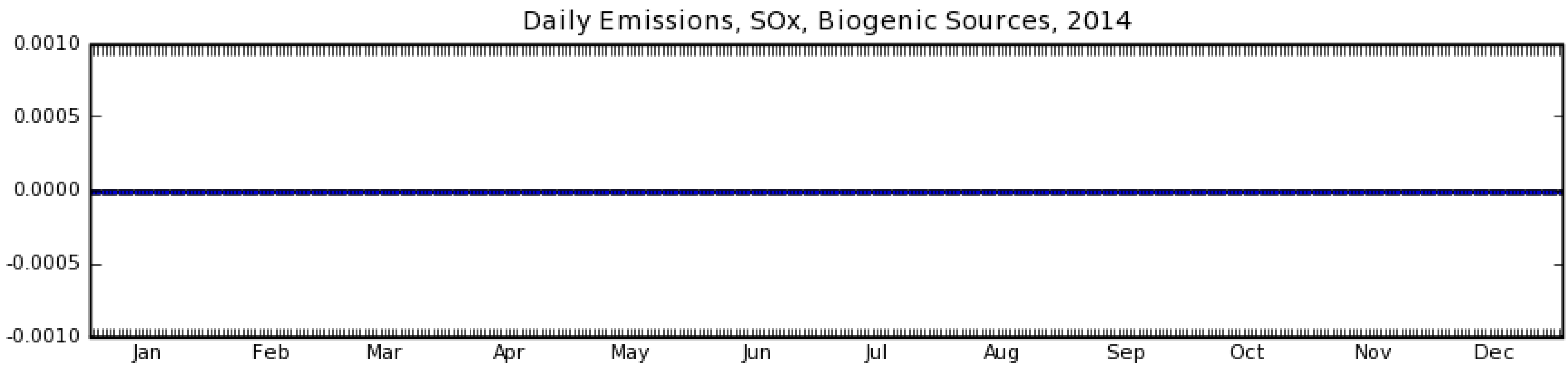
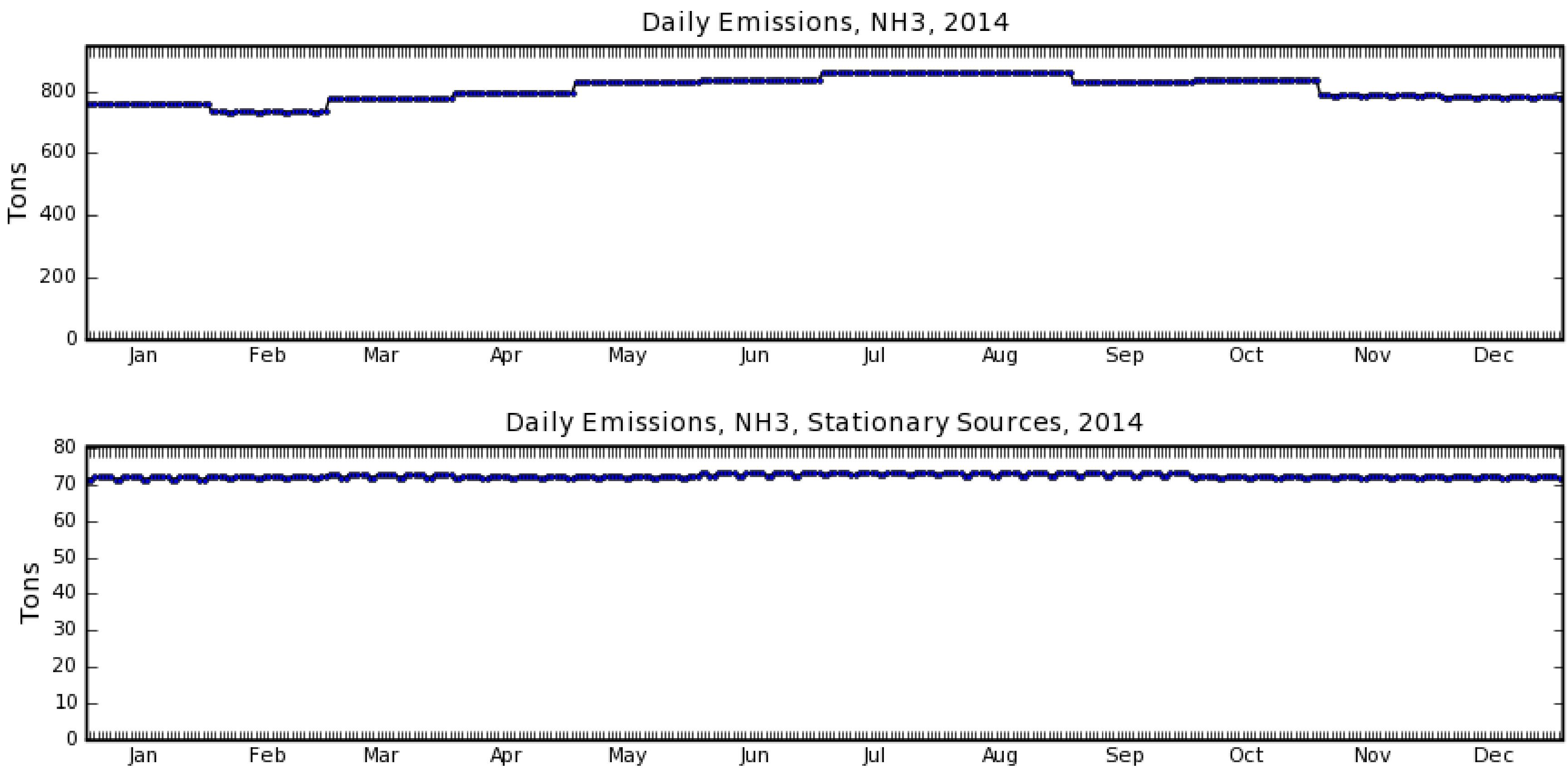
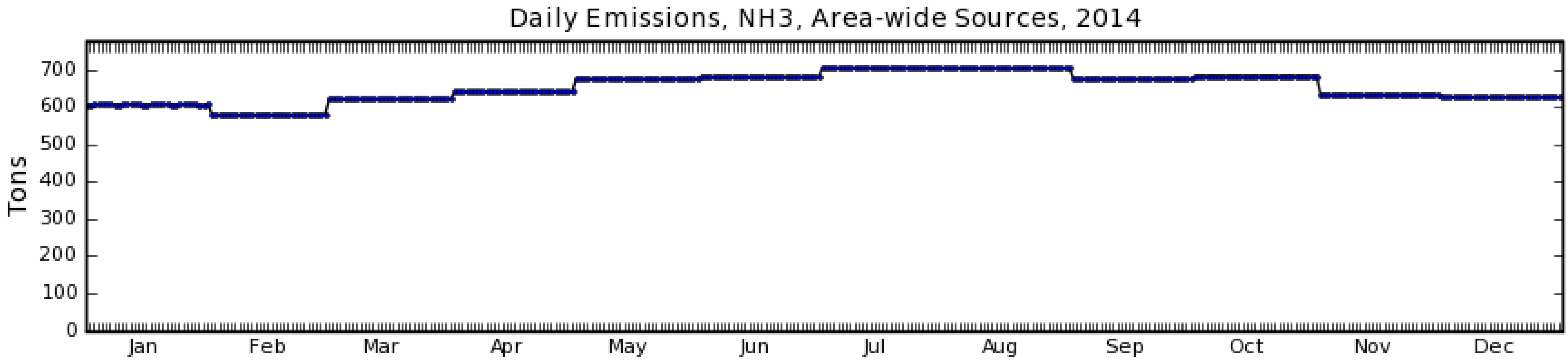
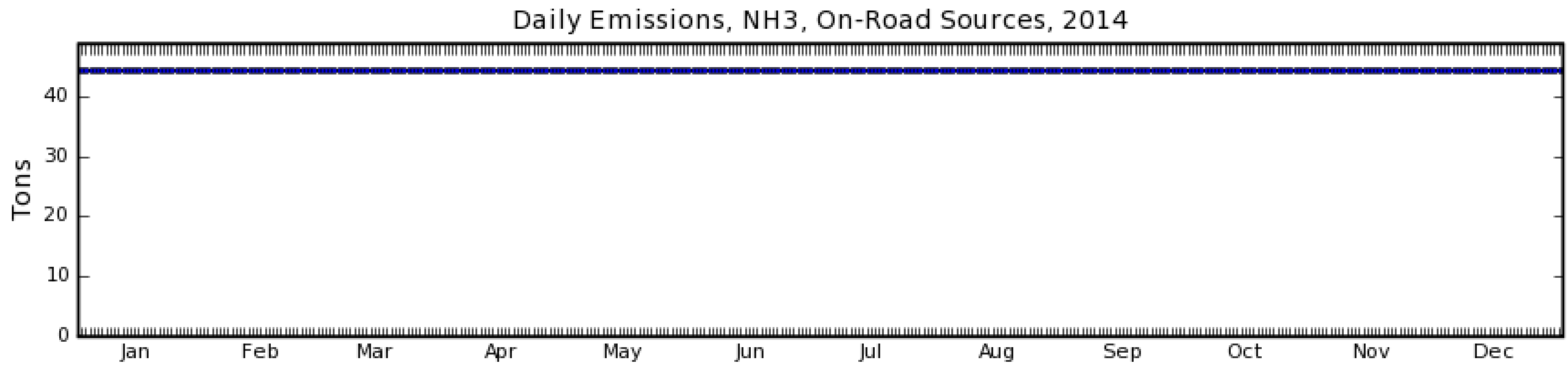
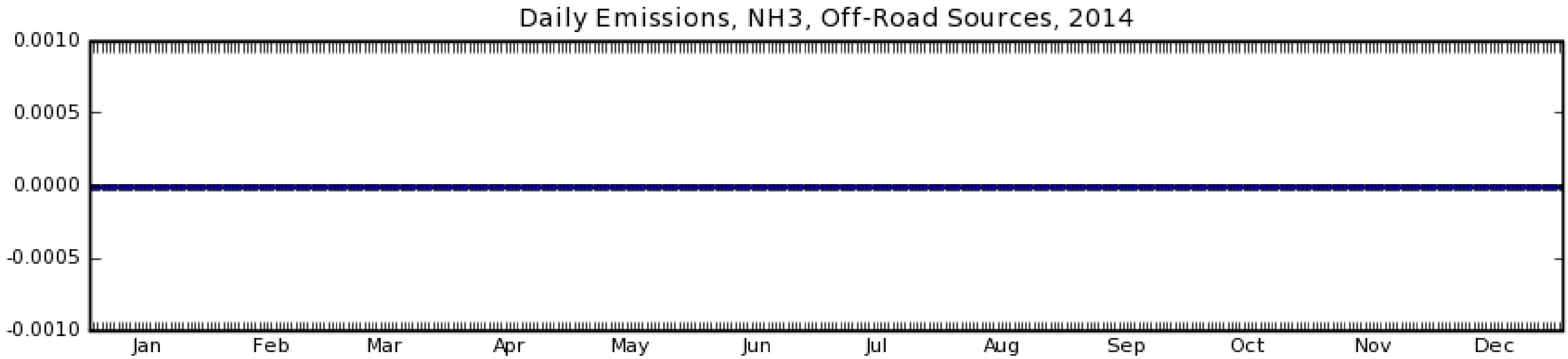

Daily Emissions, SOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

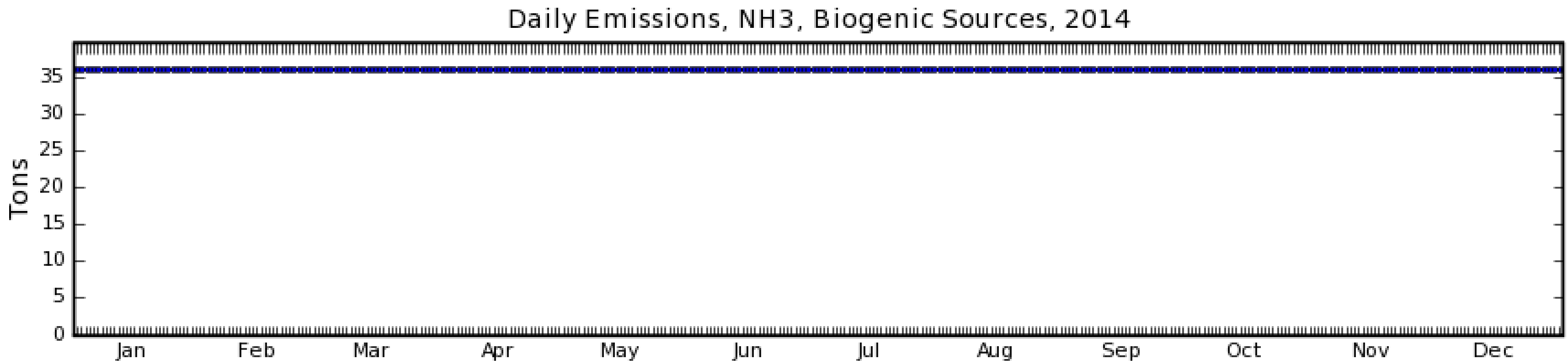
**Figure 3.60. Daily Emissions of NH3 in 2014**




Daily Emissions, NH3, Area-wide Sources, 2014
Tons
0
100
200
300
400
500
600
700
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Daily Emissions, NH3, On-Road Sources, 2014
Tons
0
10
20
30
40
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

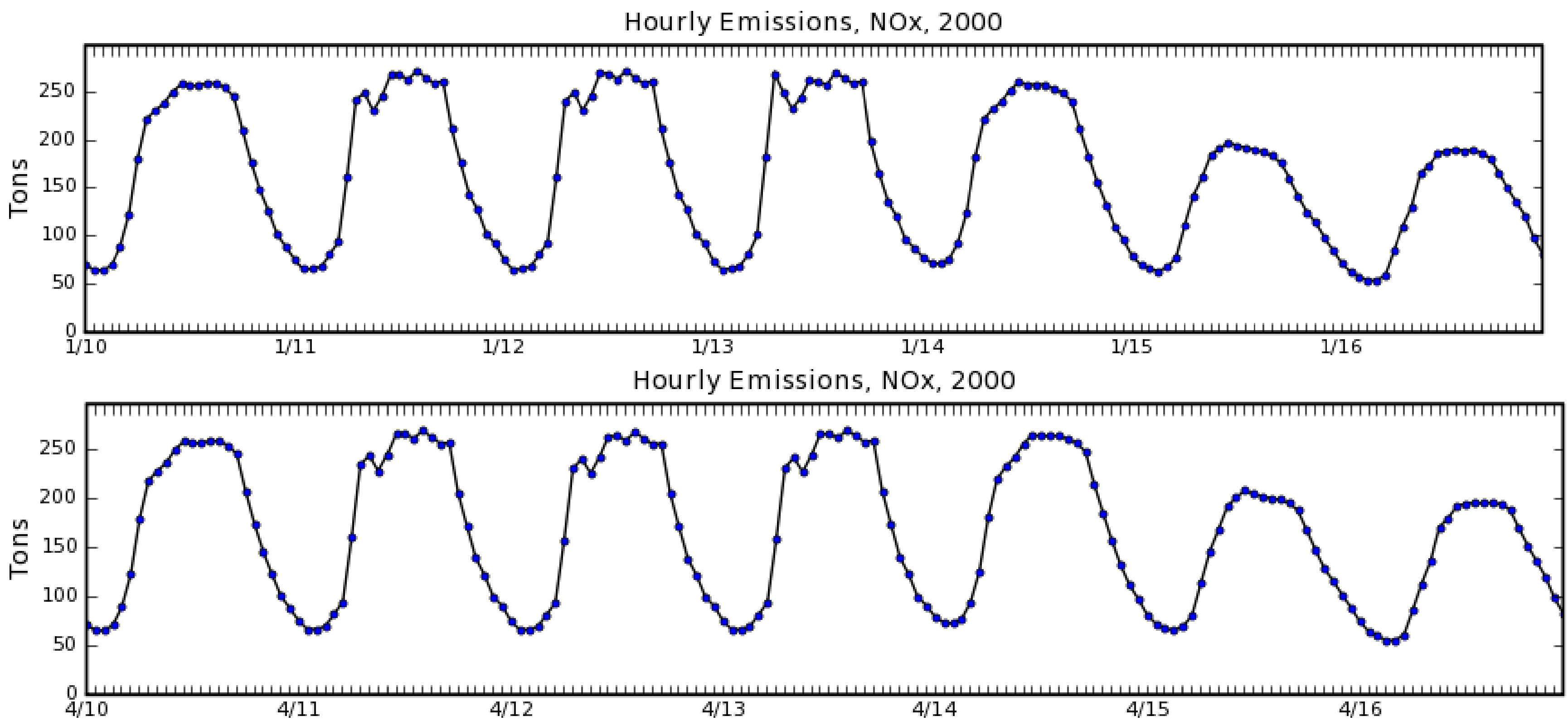

Daily Emissions, NH3, Off-Road Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

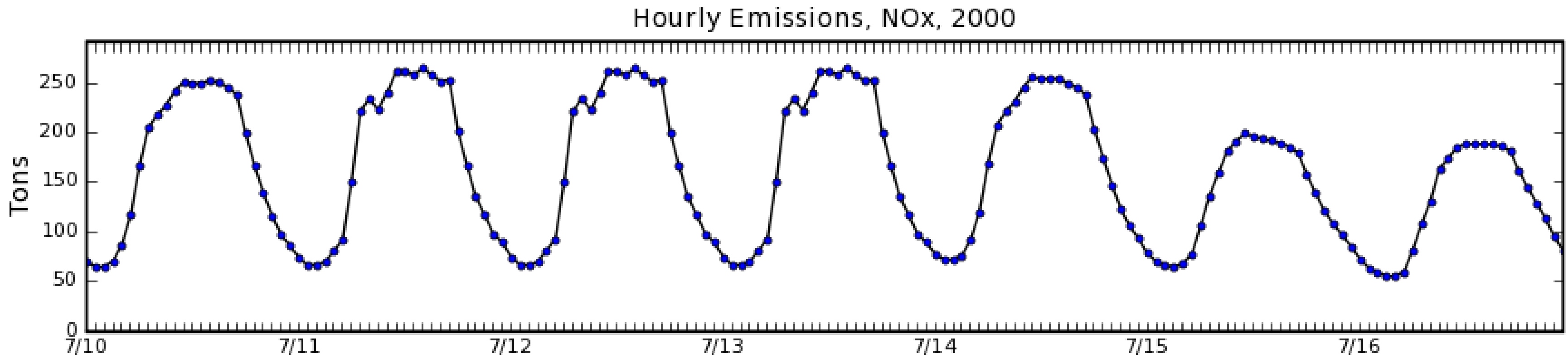

Daily Emissions, NH3, Biogenic Sources, 2014
Tons
35
30
25
20
15
10
5
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

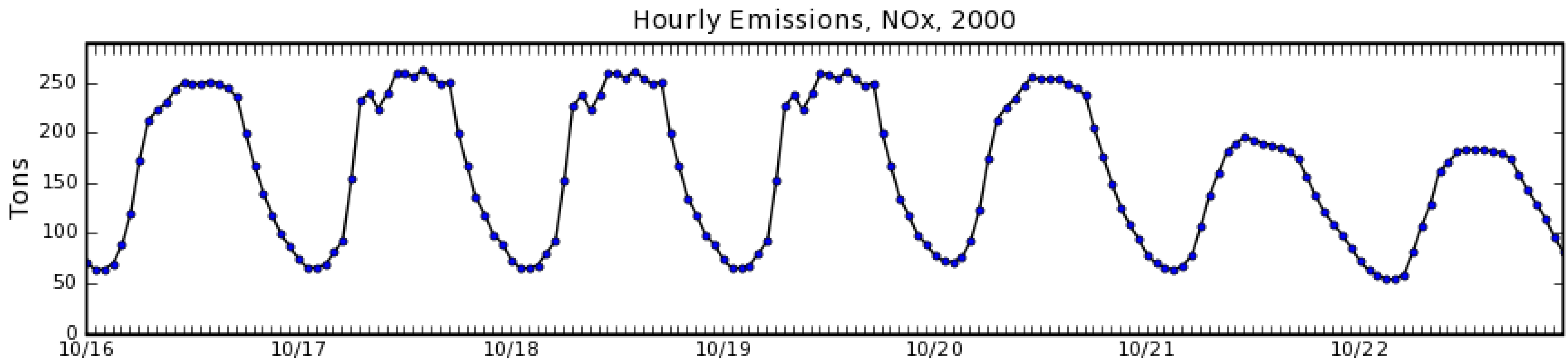
## 3.4 *Time Series Plots – Totals for Selected Weeks*

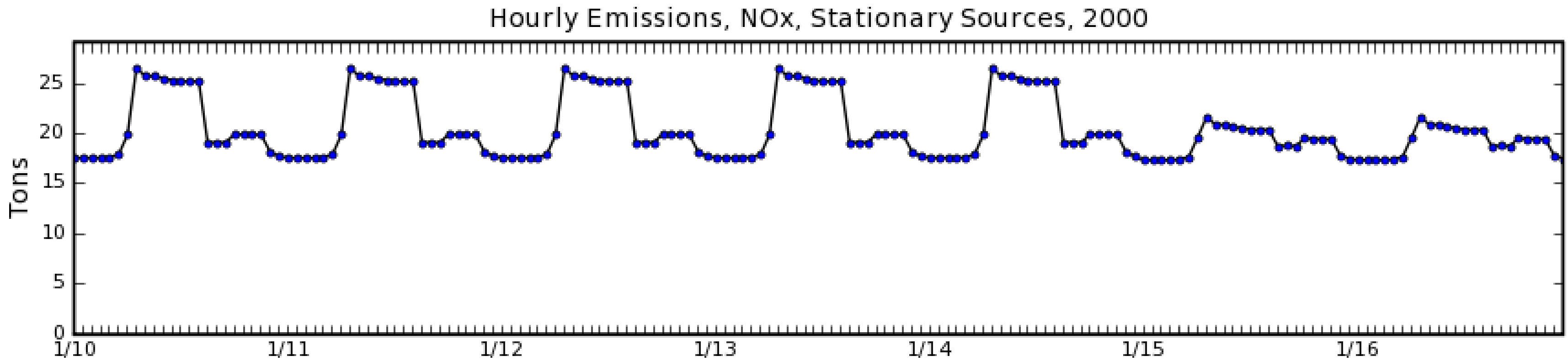
Time series plots are useful to ensure that emissions are distributed correctly across each day. The plots shown in Section 3.3 are useful to review the range of emissions over the year, but it is difficult to see the details of variations over shorter intervals such as a week. Tables 6.61 through 6.64 show daily total emissions of NOx, $PM_{2.5}$ , SOx and $NH_3$ for the CCOS domain in the year 2000. The plots are ordered showing first all sources combined followed by daily emissions broken down into stationary, area-wide, on-road, other mobile and biogenics. Within each category (six altogether), these tables show a week in January, April, July and October with adjustments 1 and 2 applied. Similarly, tables 6.65 through 6.68 show comparable tables for 2005 and tables 6.69 through 6.72 show comparable tables for 2014.

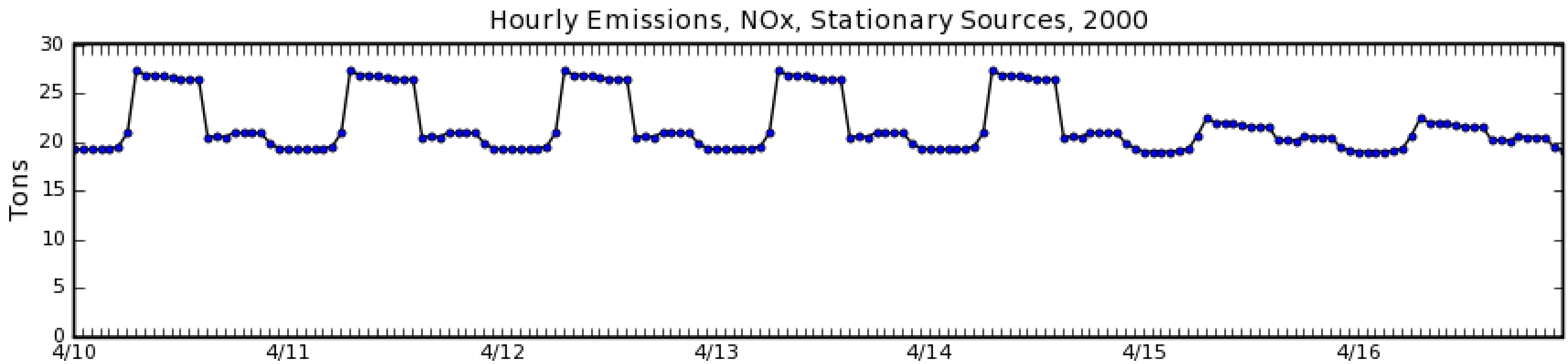
**Figure 3.61. Daily Emissions of NOx in 2000**

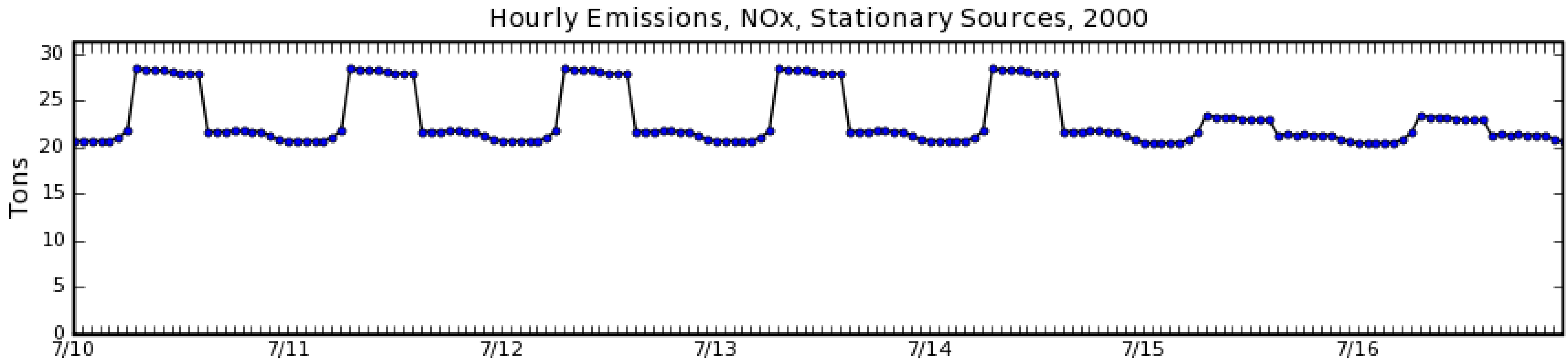


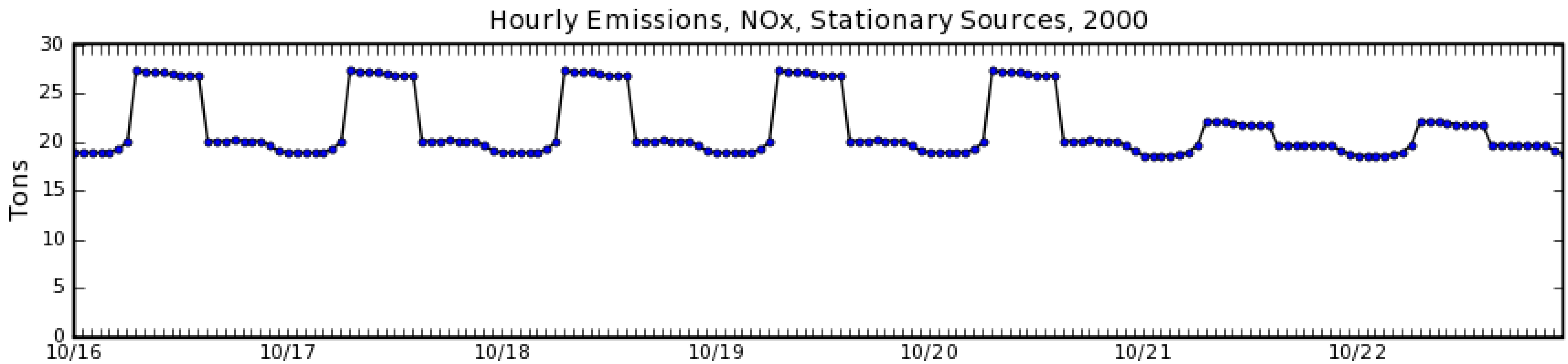

Hourly Emissions, NOx, 2000
Tons
0
50
100
150
200
250
7/10
7/11
7/12
7/13
7/14
7/15
7/16

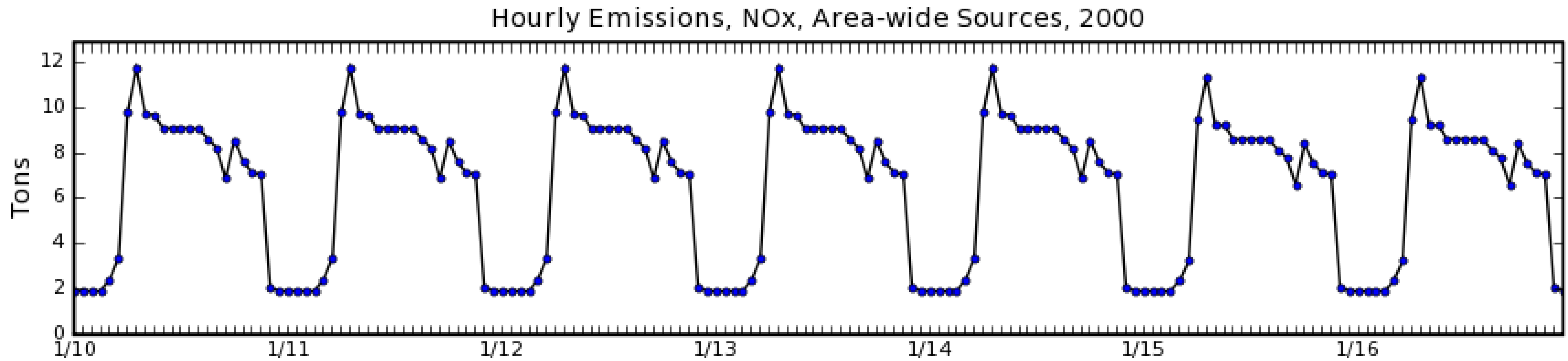

Hourly Emissions, NOx, 2000
Tons
0
50
100
150
200
250
10/16
10/17
10/18
10/19
10/20
10/21
10/22

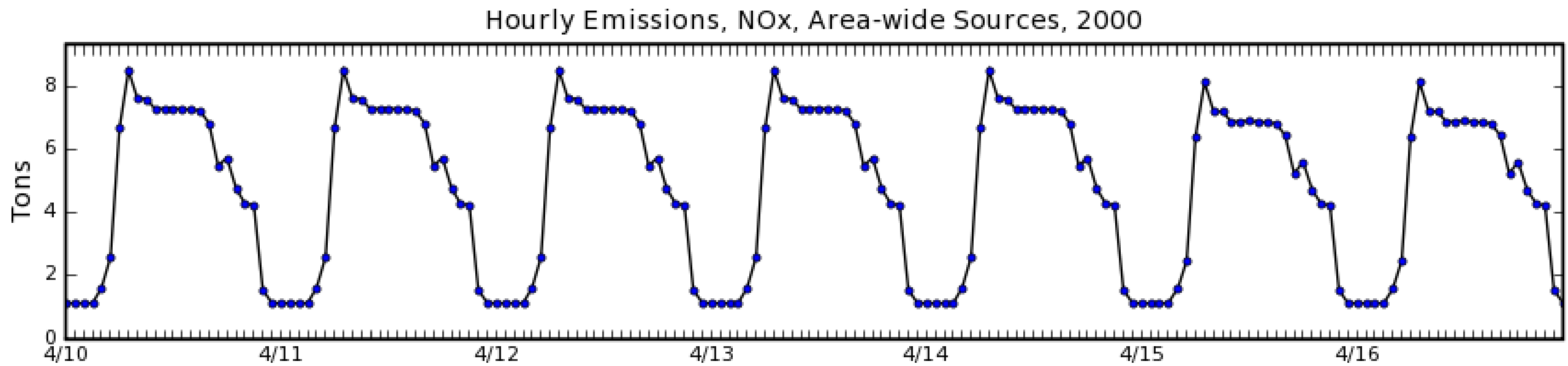

Hourly Emissions, NOx, Stationary Sources, 2000
Tons
0
5
10
15
20
25
1/10
1/11
1/12
1/13
1/14
1/15
1/16

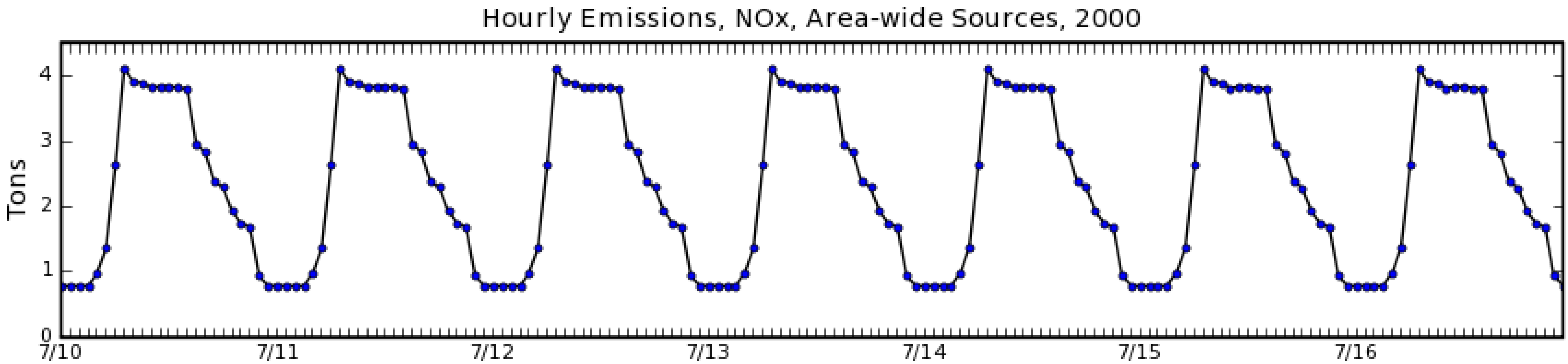

Hourly Emissions, NOx, Stationary Sources, 2000
Tons
0
5
10
15
20
25
30
4/10
4/11
4/12
4/13
4/14
4/15
4/16

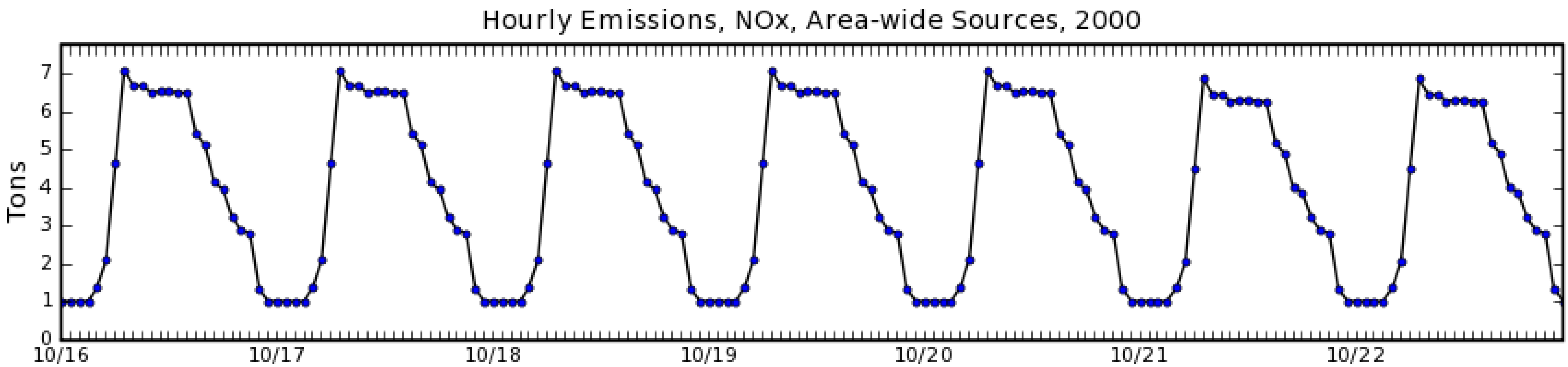

Hourly Emissions, NOx, Stationary Sources, 2000
Tons
0
5
10
15
20
25
30
7/10
7/11
7/12
7/13
7/14
7/15
7/16

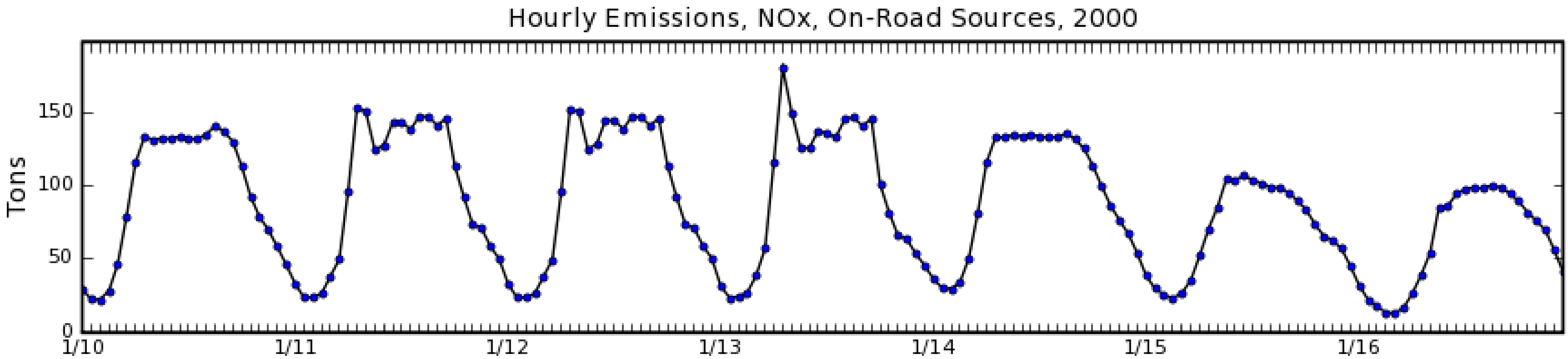

Hourly Emissions, NOx, Stationary Sources, 2000
Tons
0
5
10
15
20
25
30
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NOx, Area-wide Sources, 2000
Tons
0
2
4
6
8
10
12
1/10
1/11
1/12
1/13
1/14
1/15
1/16

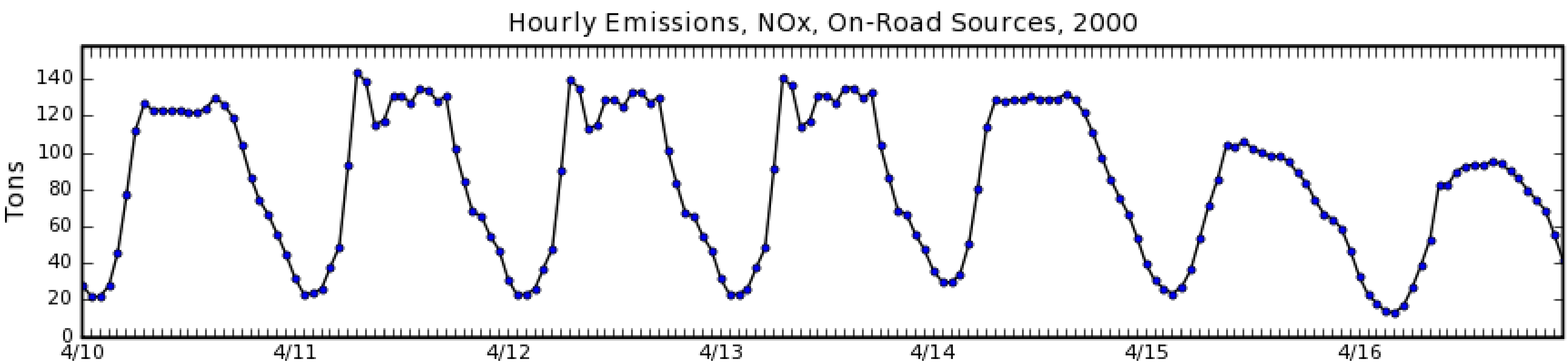

Hourly Emissions, NOx, Area-wide Sources, 2000
Tons
0
2
4
6
8
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NOx, Area-wide Sources, 2000
Tons
0
1
2
3
4
7/10
7/11
7/12
7/13
7/14
7/15
7/16

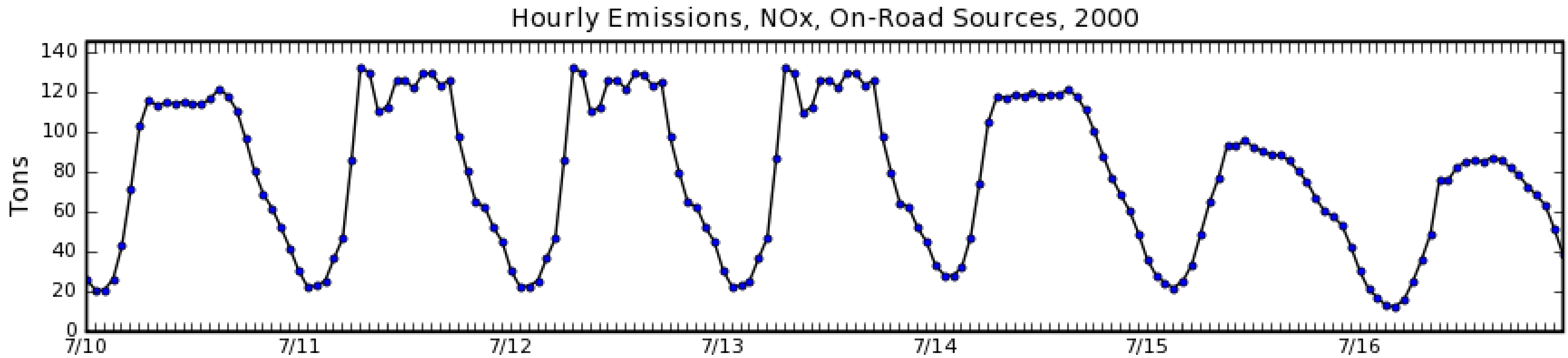

Hourly Emissions, NOx, Area-wide Sources, 2000
Tons
0
1
2
3
4
5
6
7
10/16
10/17
10/18
10/19
10/20
10/21
10/22

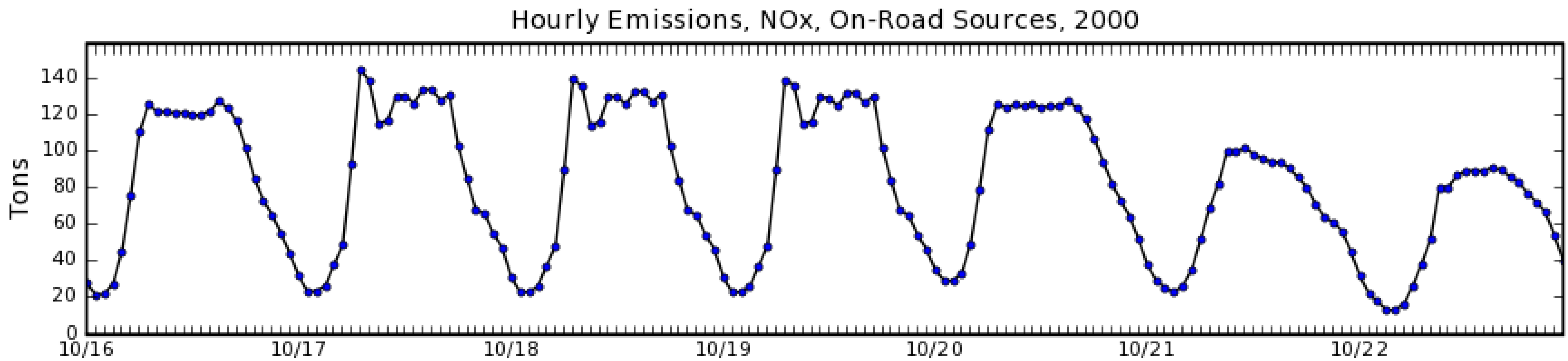


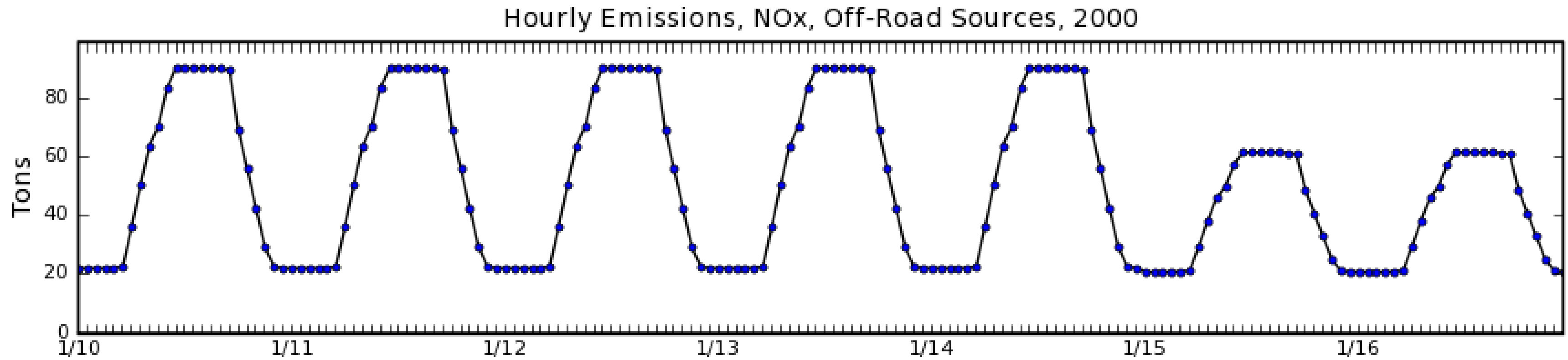
Hourly Emissions, NOx, On-Road Sources, 2000
Tons
0
50
100
150
1/10
1/11
1/12
1/13
1/14
1/15
1/16

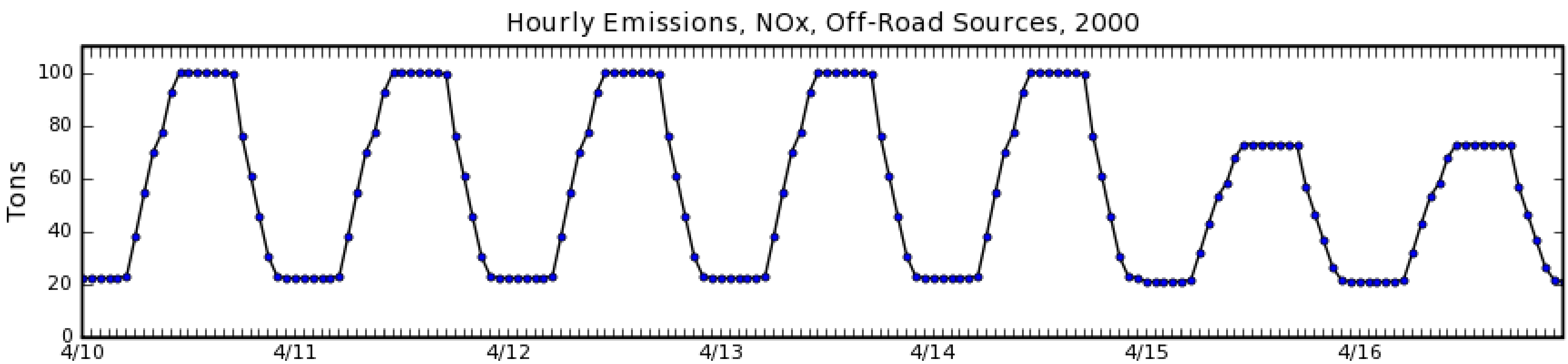



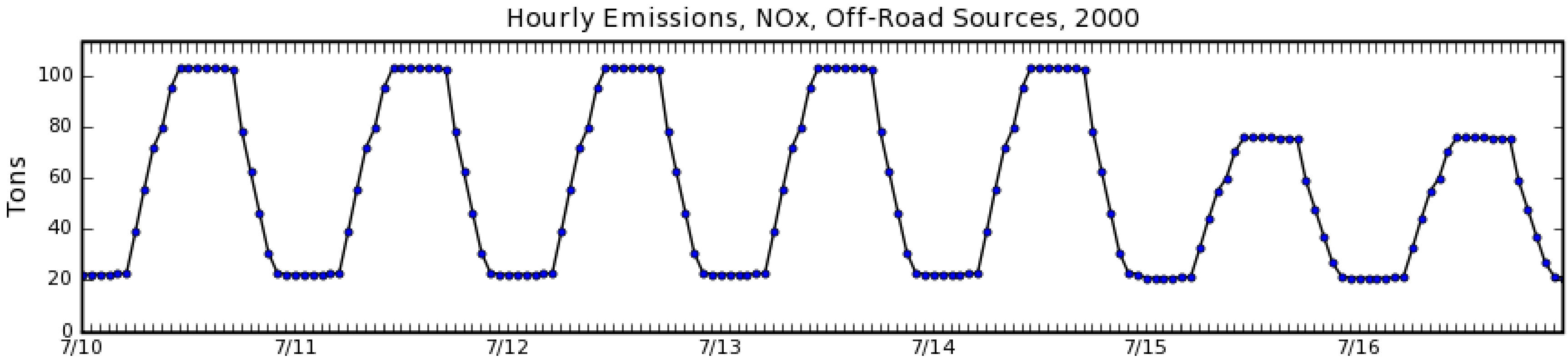
Hourly Emissions, NOx, On-Road Sources, 2000
Tons
0
20
40
60
80
100
120
140
4/10
4/11
4/12
4/13
4/14
4/15
4/16

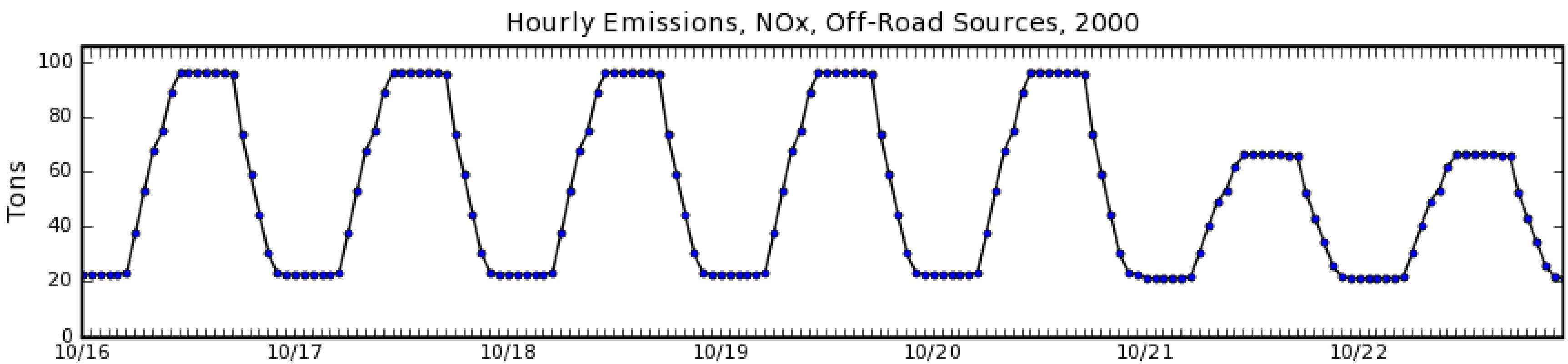

Hourly Emissions, NOx, On-Road Sources, 2000
Tons
0
20
40
60
80
100
120
140
7/10
7/11
7/12
7/13
7/14
7/15
7/16

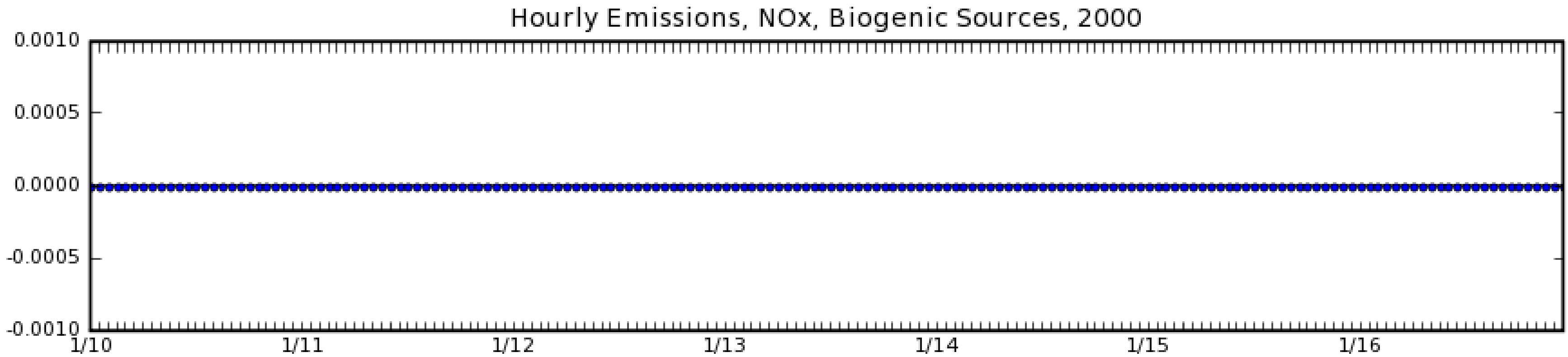

Hourly Emissions, NOx, On-Road Sources, 2000
Tons
0
20
40
60
80
100
120
140
10/16
10/17
10/18
10/19
10/20
10/21
10/22

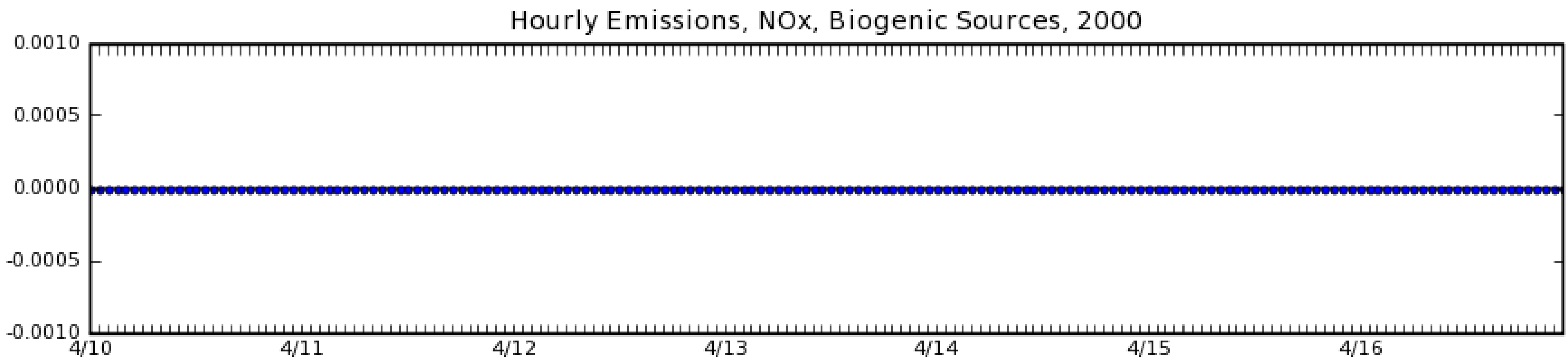

Hourly Emissions, NOx, Off-Road Sources, 2000
Tons
0
20
40
60
80
1/10
1/11
1/12
1/13
1/14
1/15
1/16

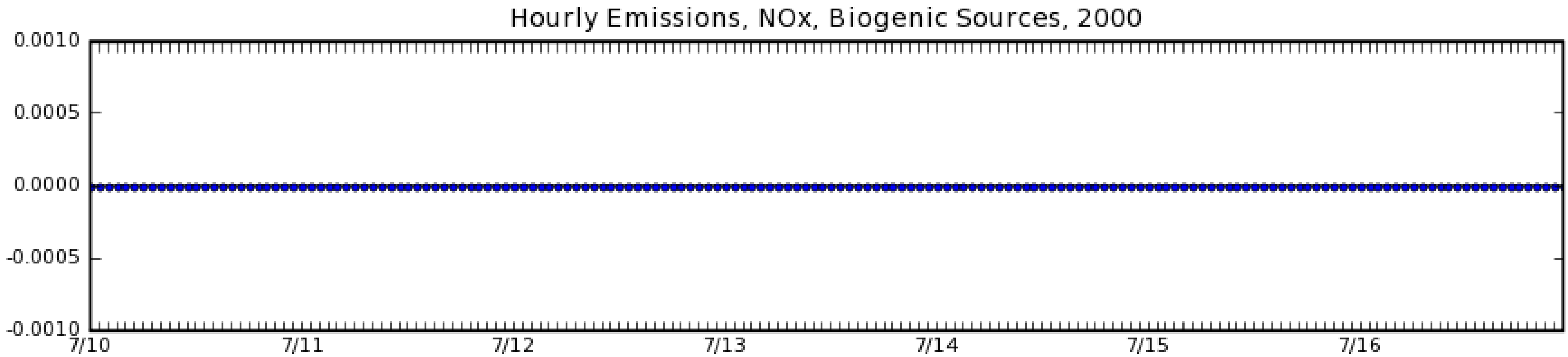

Hourly Emissions, NOx, Off-Road Sources, 2000
Tons
0
20
40
60
80
100
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NOx, Off-Road Sources, 2000
Tons
0
20
40
60
80
100
7/10
7/11
7/12
7/13
7/14
7/15
7/16

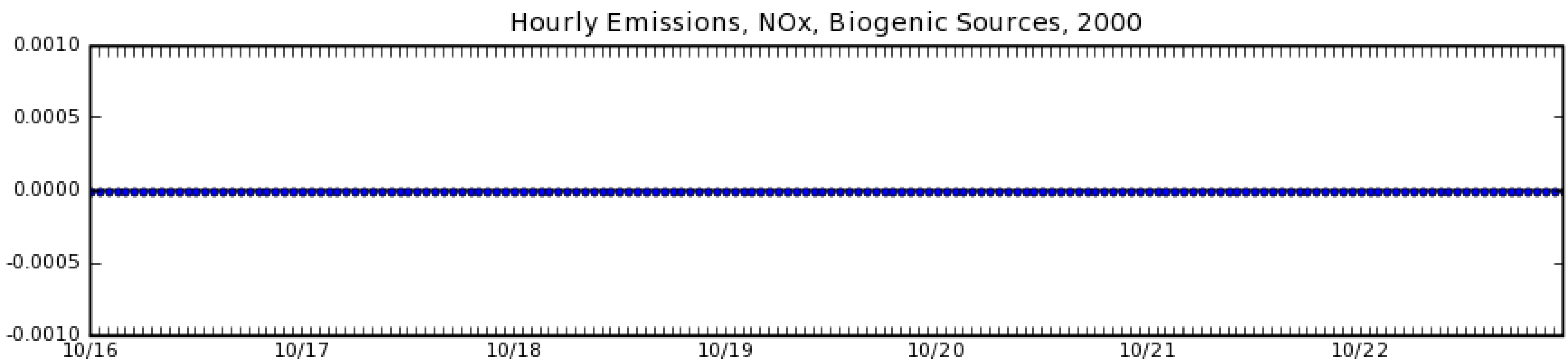

Hourly Emissions, NOx, Off-Road Sources, 2000
Tons
0
20
40
60
80
100
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, NOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16

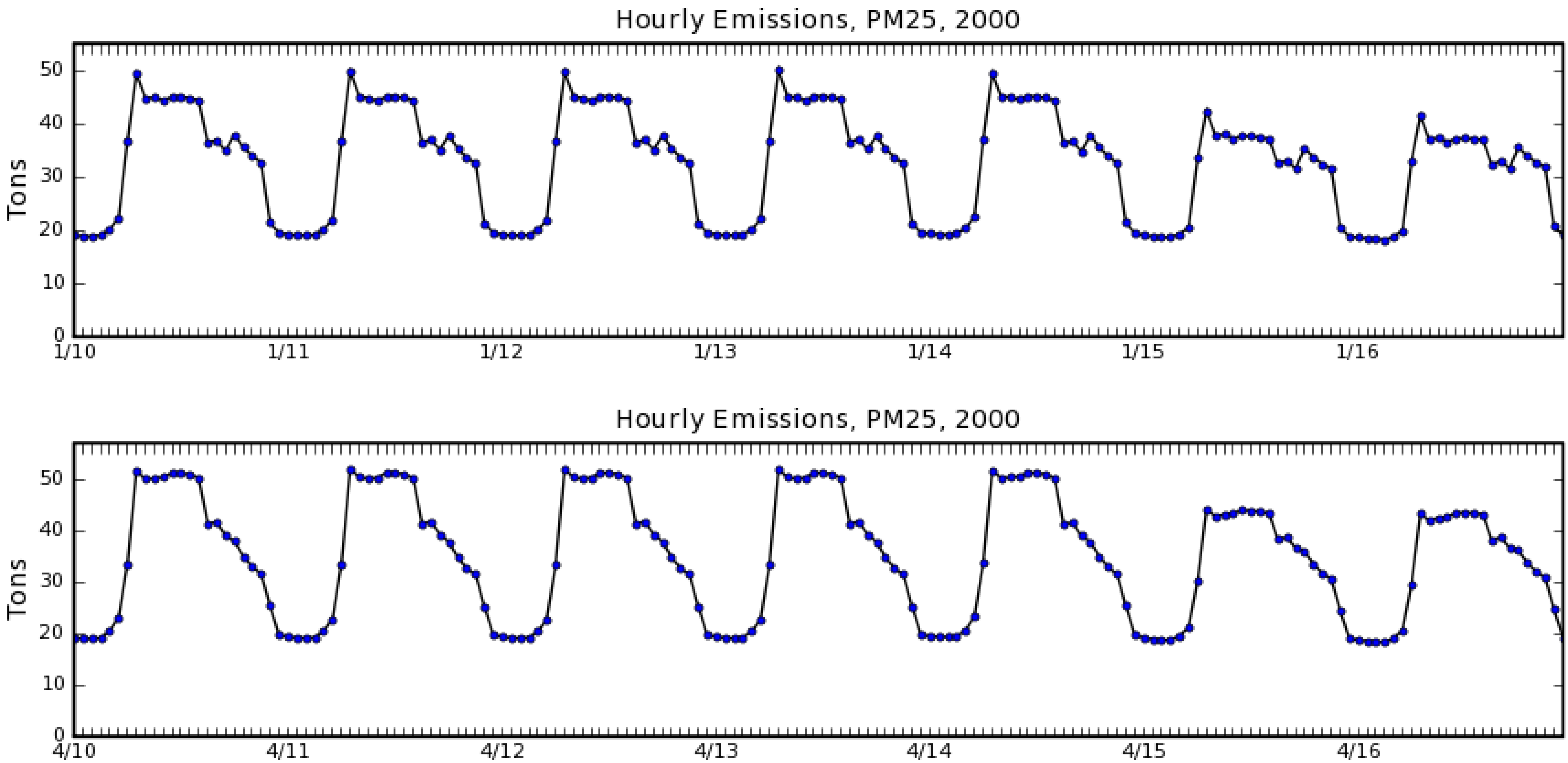


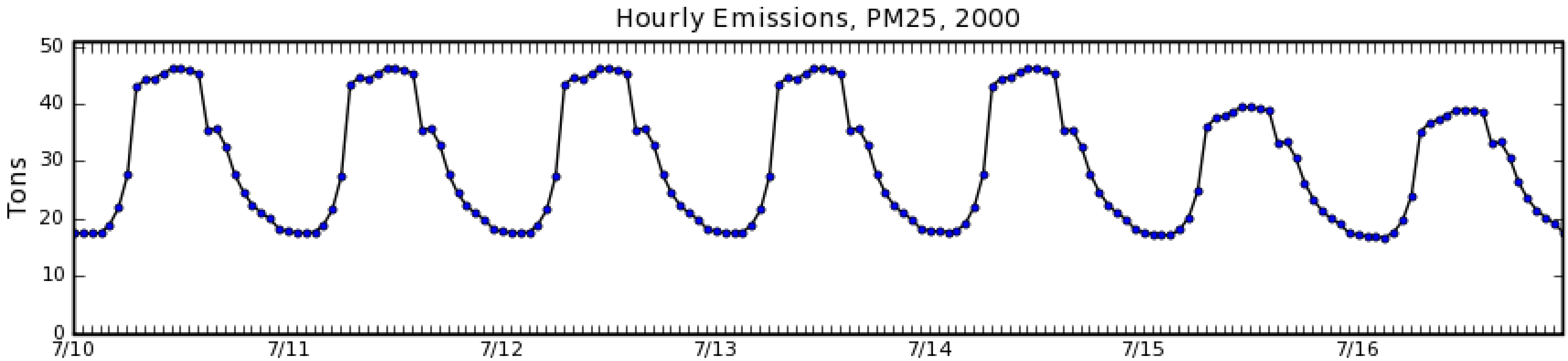
Hourly Emissions, NOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

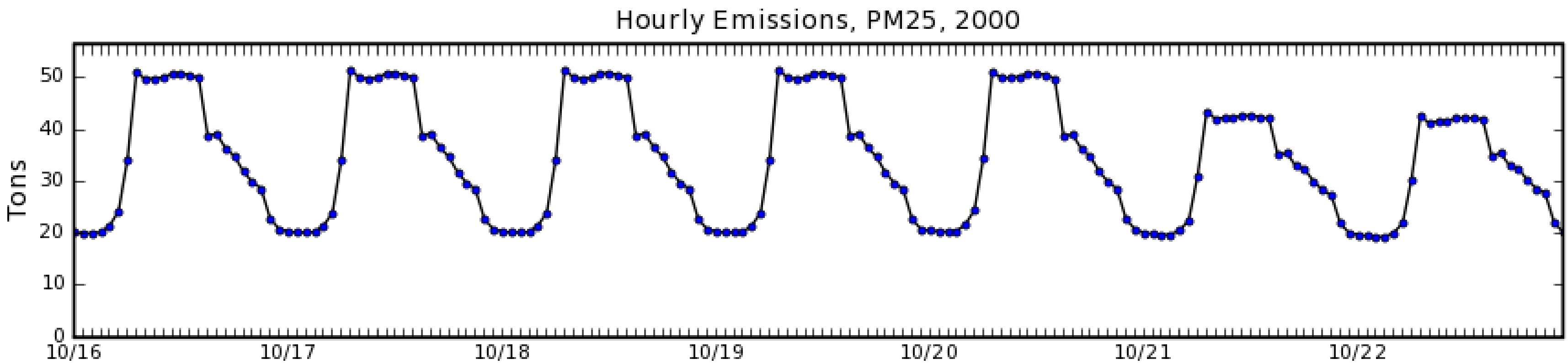



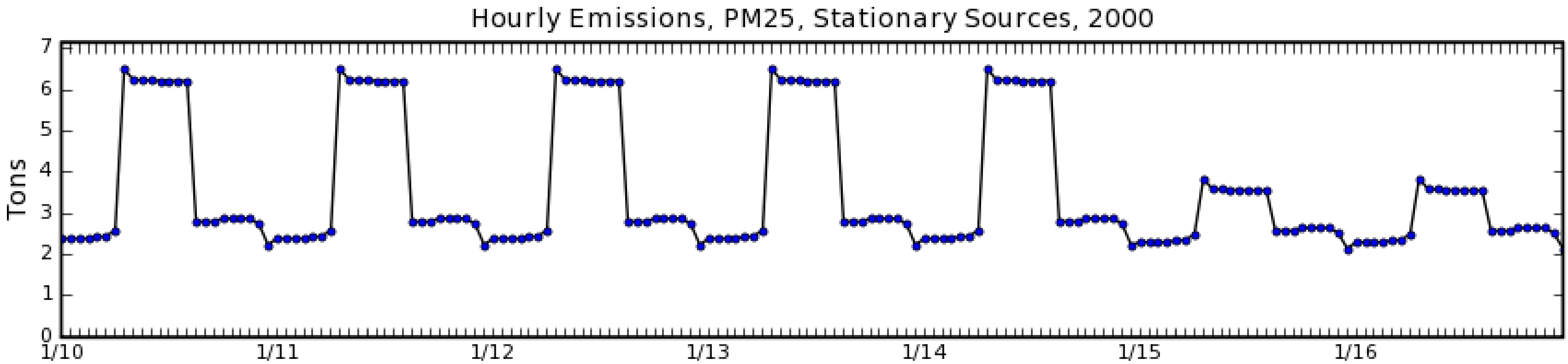
Hourly Emissions, NOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

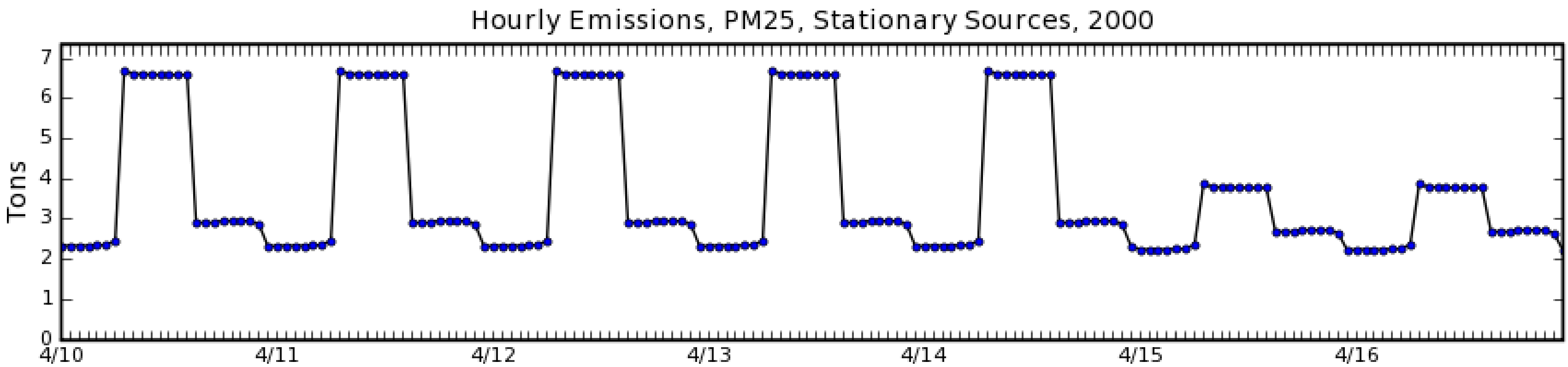
**Figure 3.62. Daily Emissions of PM2.5 in 2000**

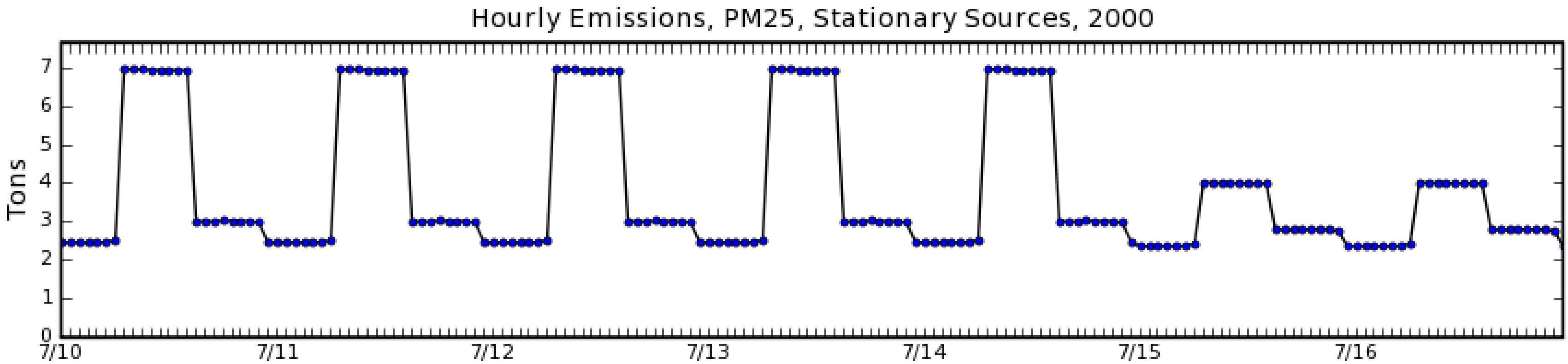


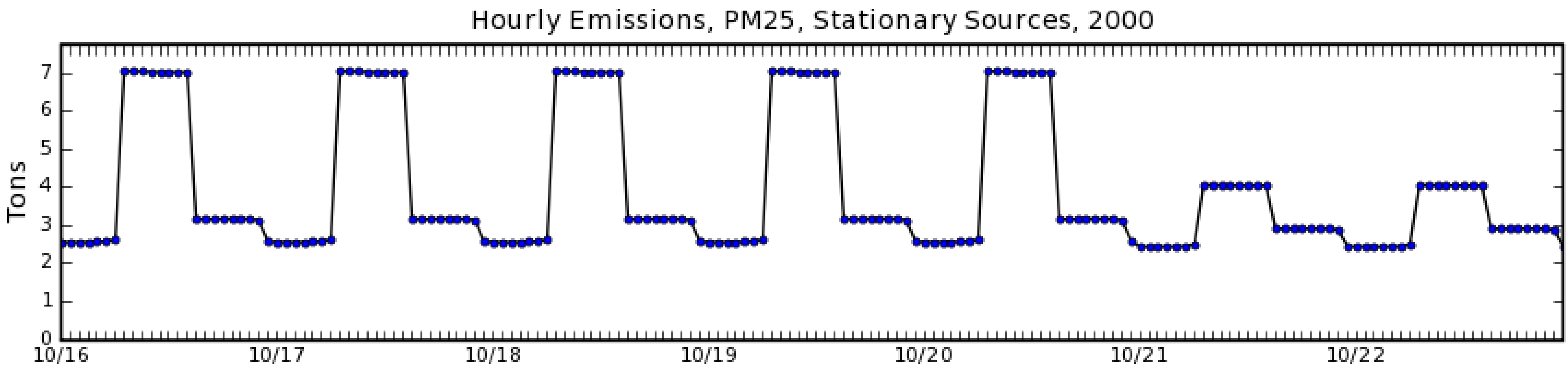

Hourly Emissions, PM25, 2000
Tons
0
10
20
30
40
50
7/10
7/11
7/12
7/13
7/14
7/15
7/16

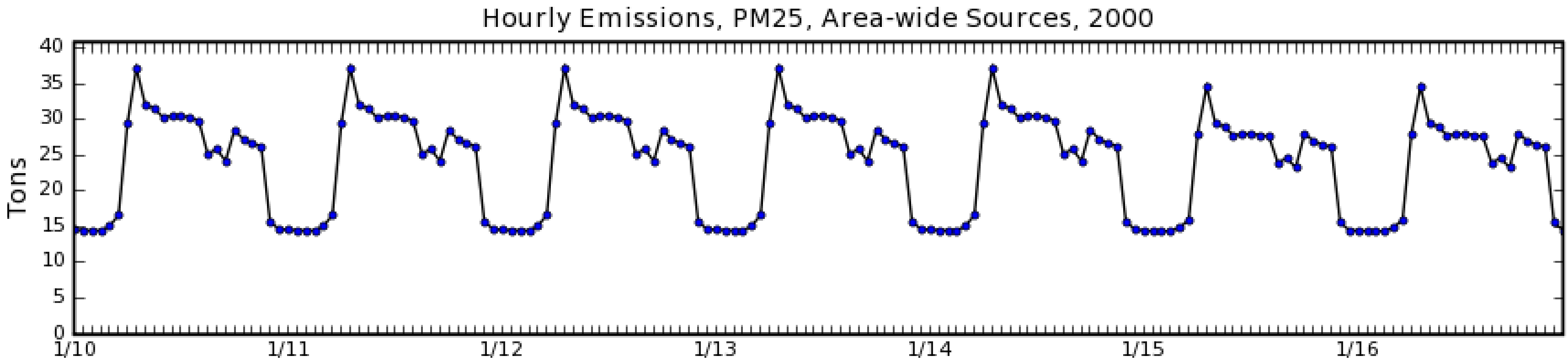

Hourly Emissions, PM25, 2000
Tons
0
10
20
30
40
50
10/16
10/17
10/18
10/19
10/20
10/21
10/22

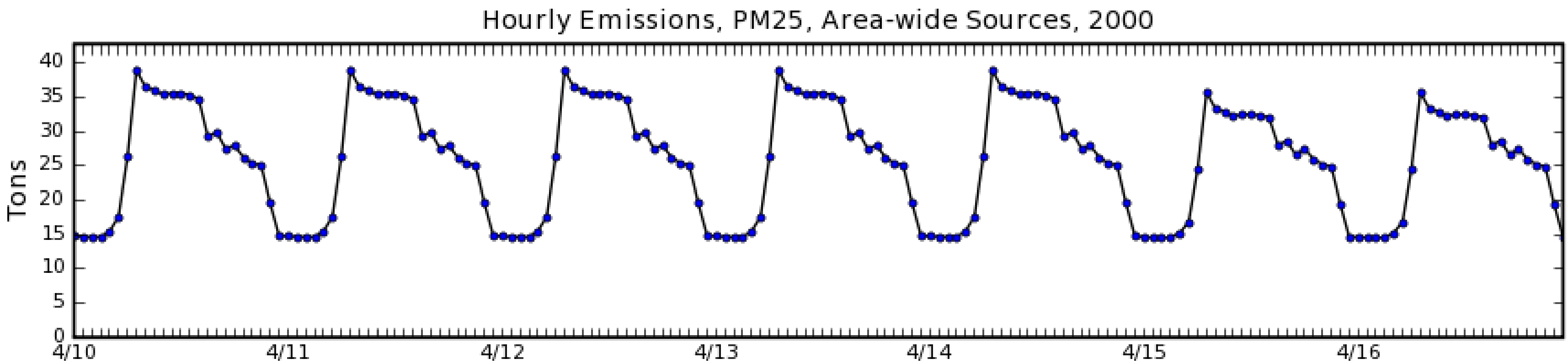

Hourly Emissions, PM25, Stationary Sources, 2000
Tons
0
1
2
3
4
5
6
7
1/10
1/11
1/12
1/13
1/14
1/15
1/16

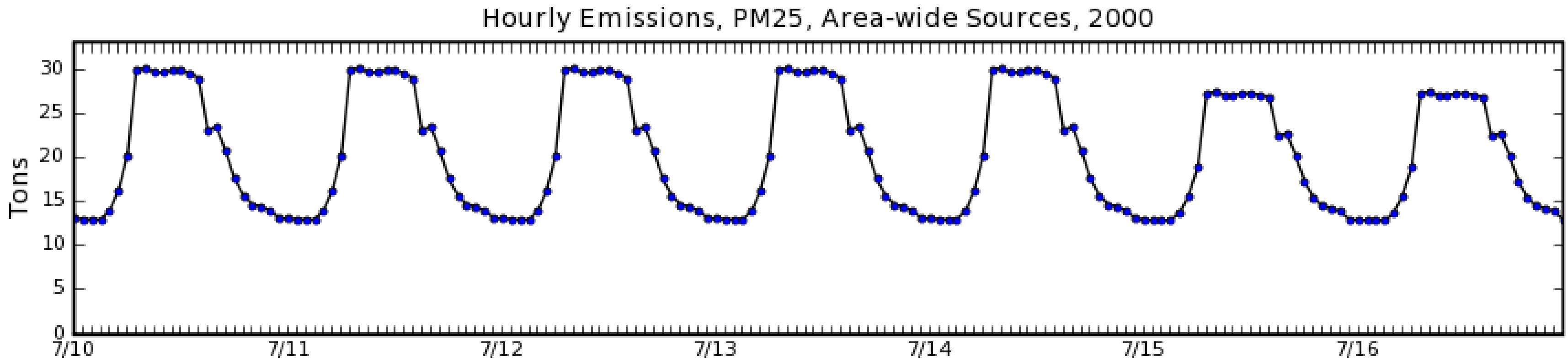

Hourly Emissions, PM25, Stationary Sources, 2000
Tons
0
1
2
3
4
5
6
7
4/10
4/11
4/12
4/13
4/14
4/15
4/16

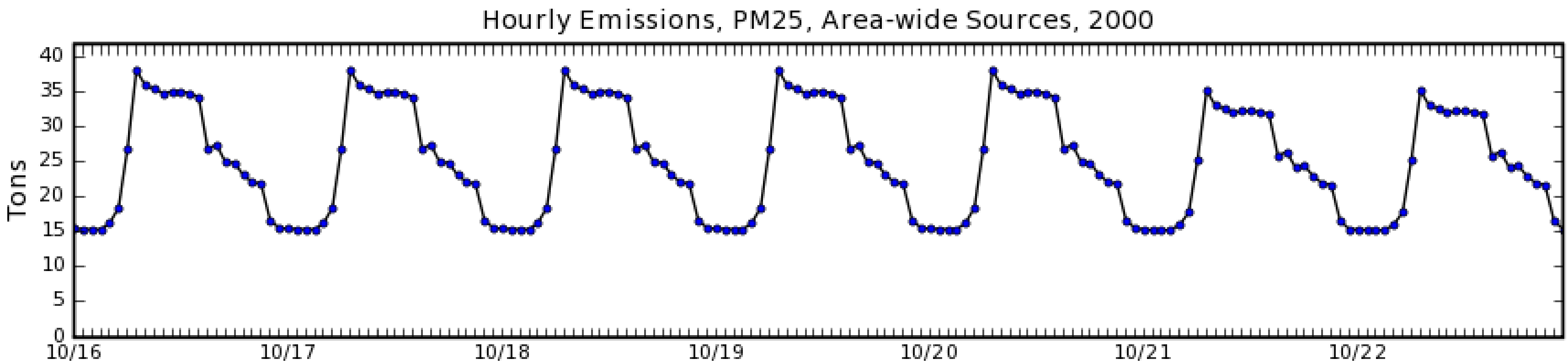

Hourly Emissions, PM25, Stationary Sources, 2000
Tons
0
1
2
3
4
5
6
7
7/10
7/11
7/12
7/13
7/14
7/15
7/16

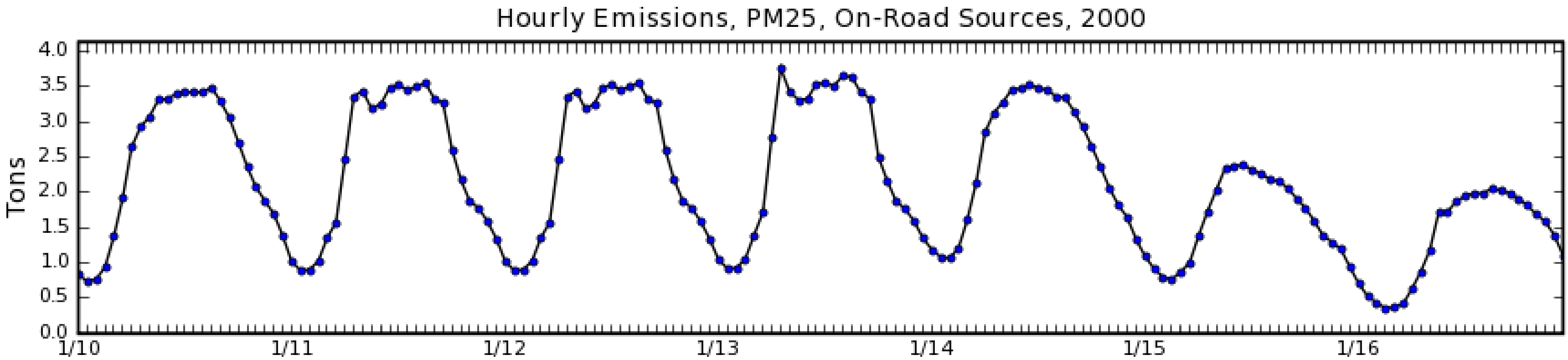

Hourly Emissions, PM25, Stationary Sources, 2000
Tons
0
1
2
3
4
5
6
7
10/16
10/17
10/18
10/19
10/20
10/21
10/22

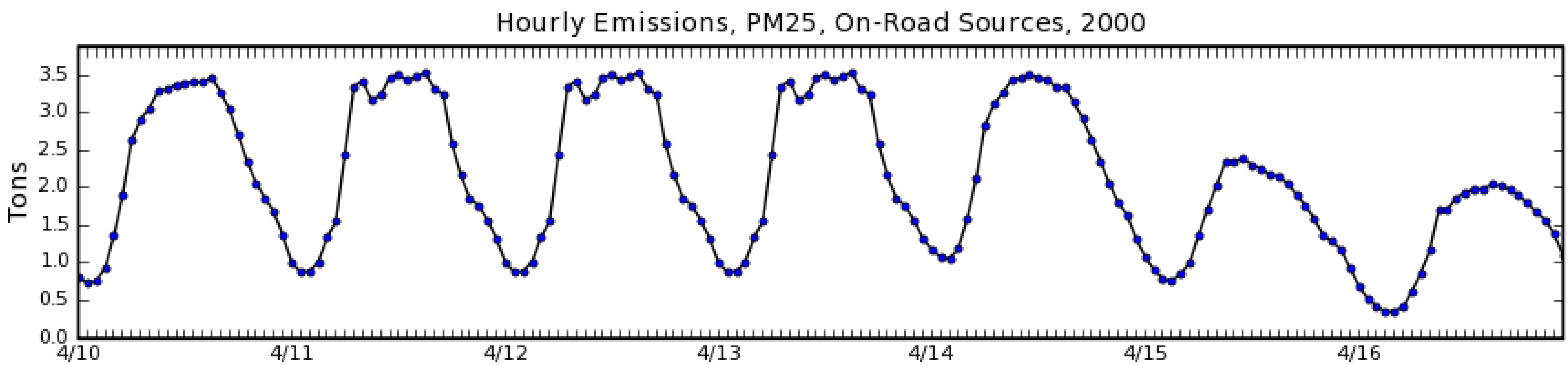

Hourly Emissions, PM25, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
30
35
40
1/10
1/11
1/12
1/13
1/14
1/15
1/16

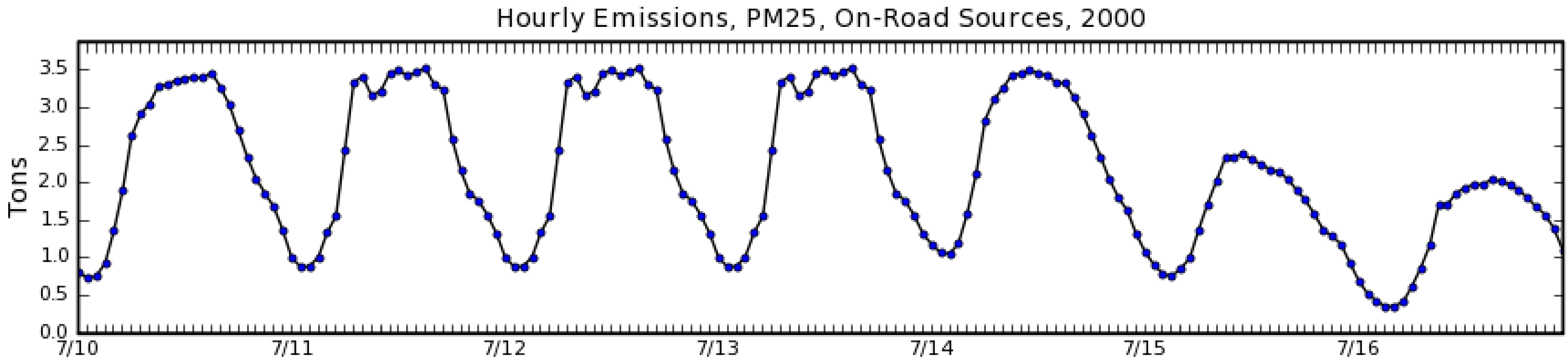

Hourly Emissions, PM25, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
30
35
40
4/10
4/11
4/12
4/13
4/14
4/15
4/16

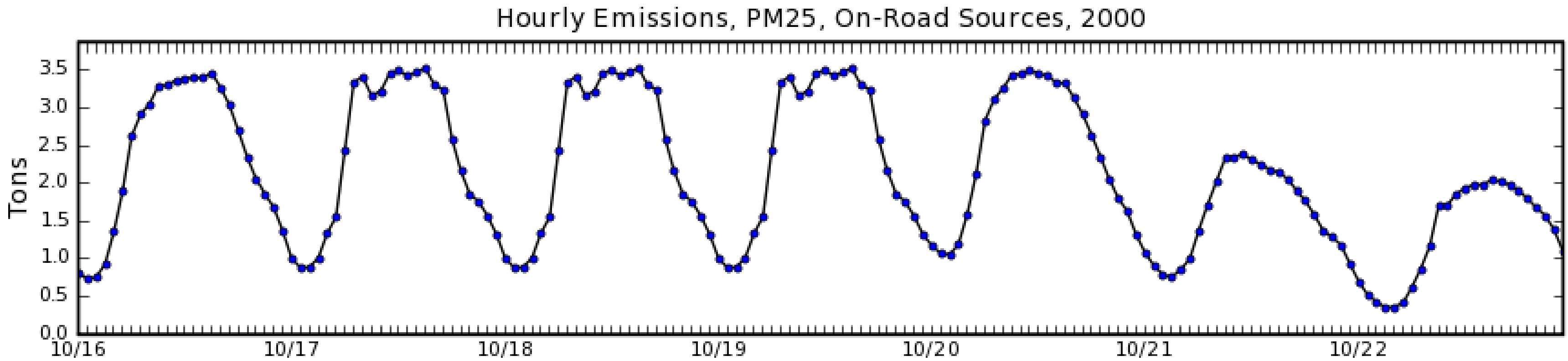

Hourly Emissions, PM25, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
30
7/10
7/11
7/12
7/13
7/14
7/15
7/16

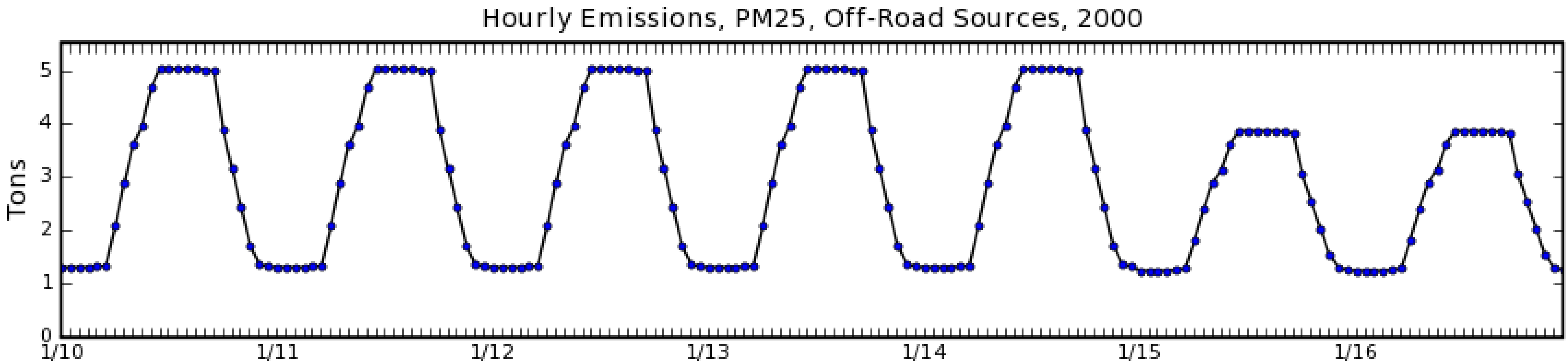

Hourly Emissions, PM25, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
30
35
40
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, PM25, On-Road Sources, 2000
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

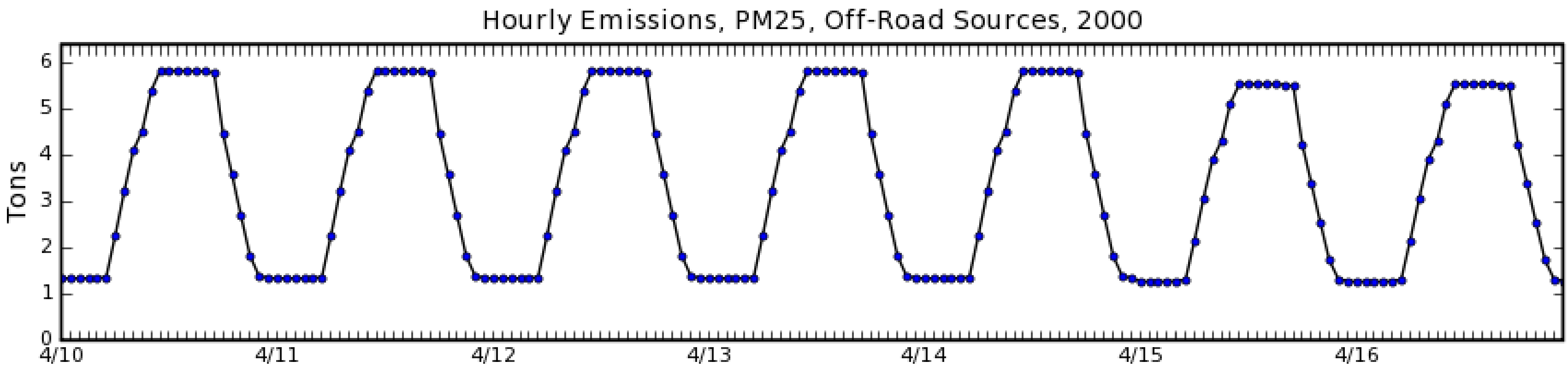

Hourly Emissions, PM25, On-Road Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, On-Road Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

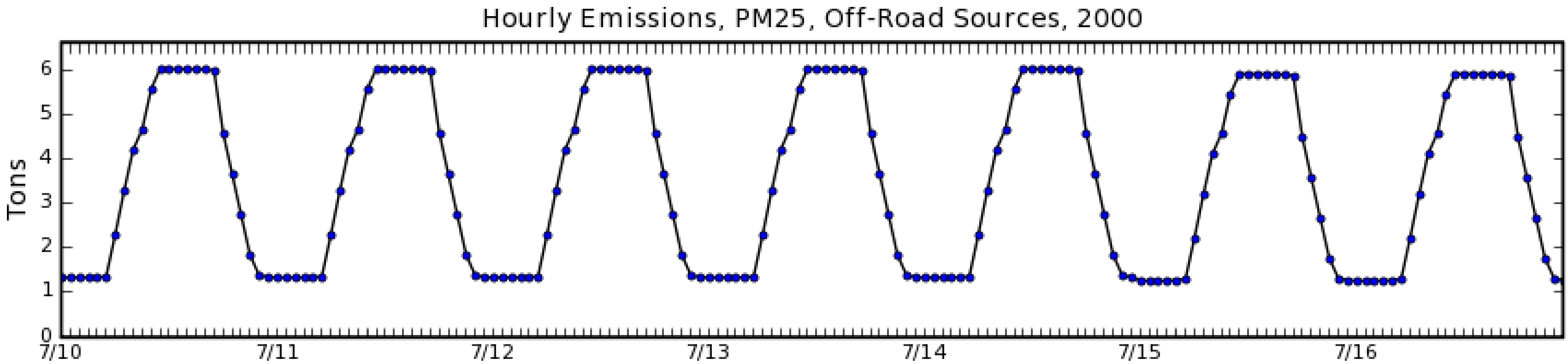

Hourly Emissions, PM25, On-Road Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

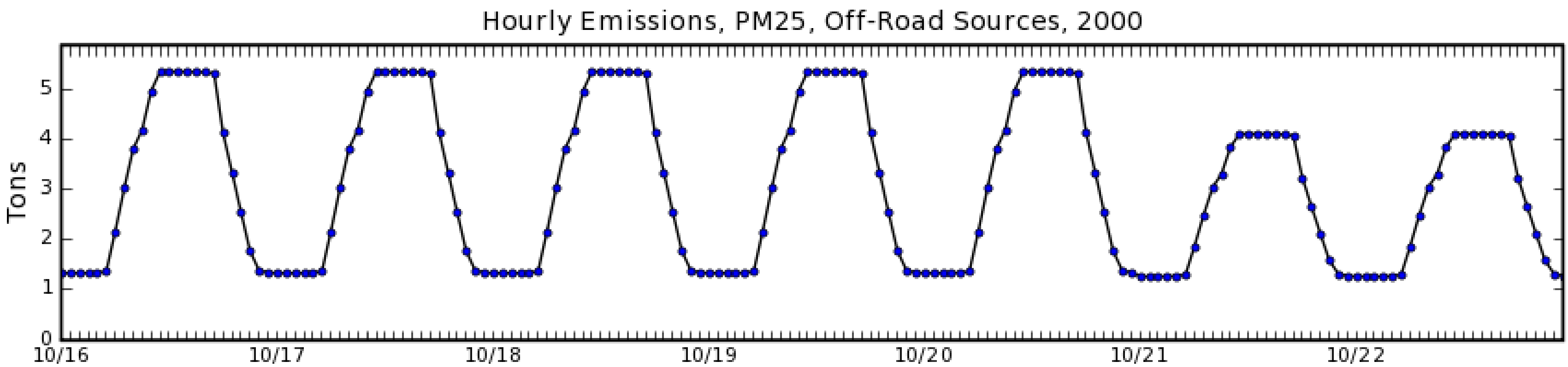


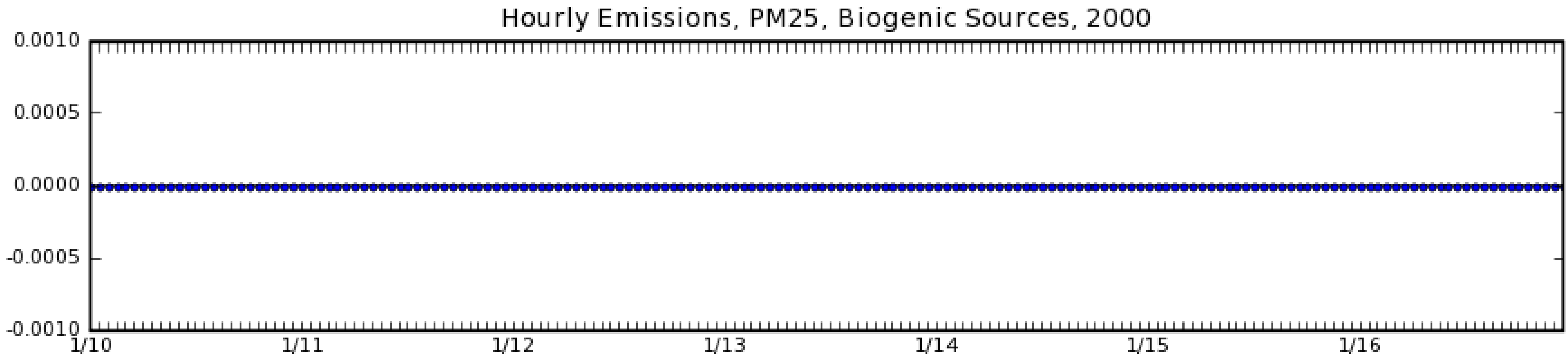
Hourly Emissions, PM25, Off-Road Sources, 2000
Tons
0
1
2
3
4
5
1/10
1/11
1/12
1/13
1/14
1/15
1/16

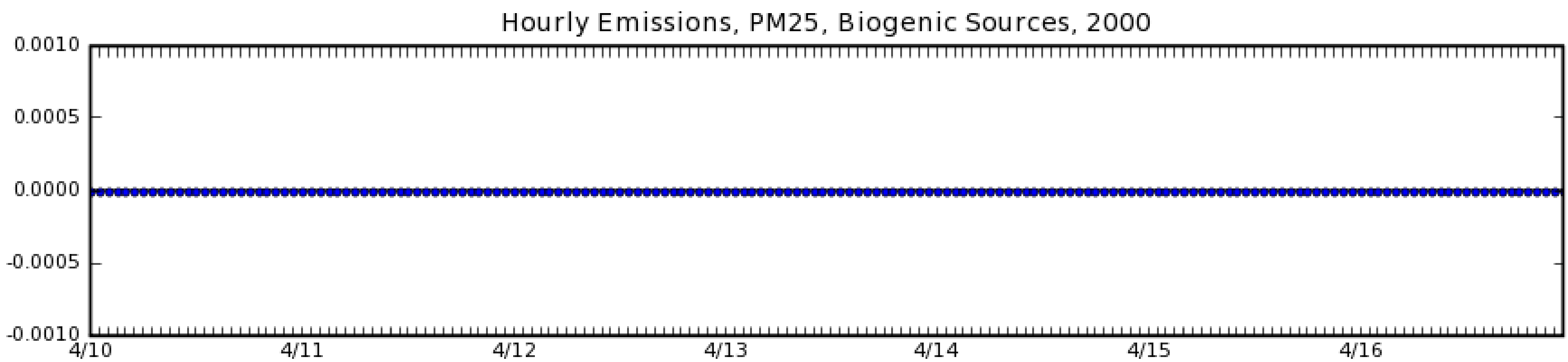



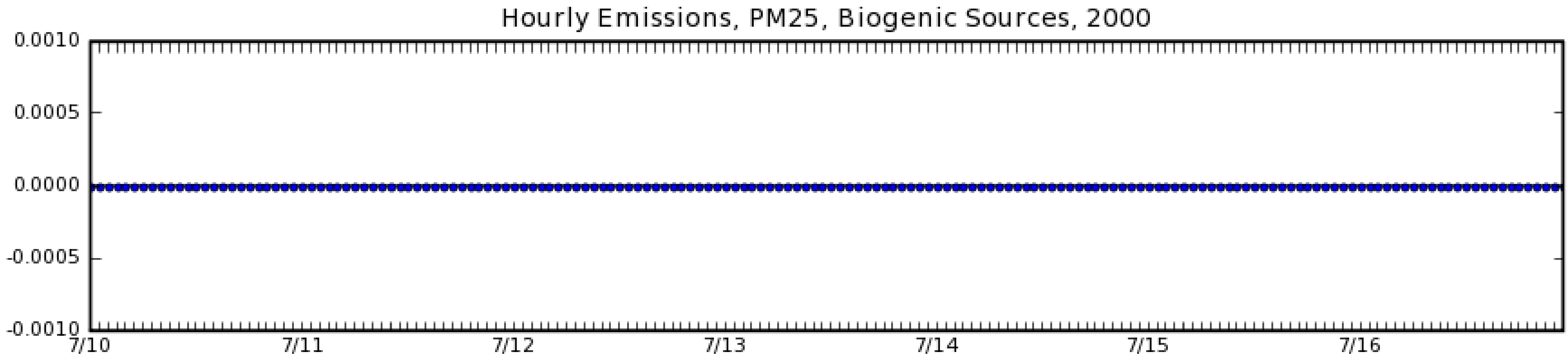
Hourly Emissions, PM25, Off-Road Sources, 2000
Tons
0
1
2
3
4
5
6
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Off-Road Sources, 2000
Tons
0
1
2
3
4
5
6
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, PM25, Off-Road Sources, 2000
Tons
0
1
2
3
4
5
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, PM25, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, PM25, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

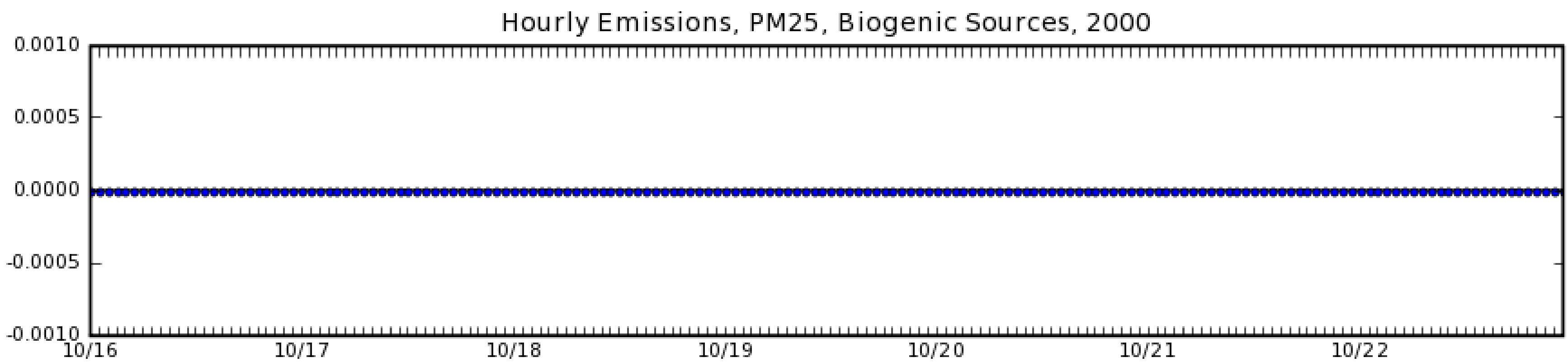
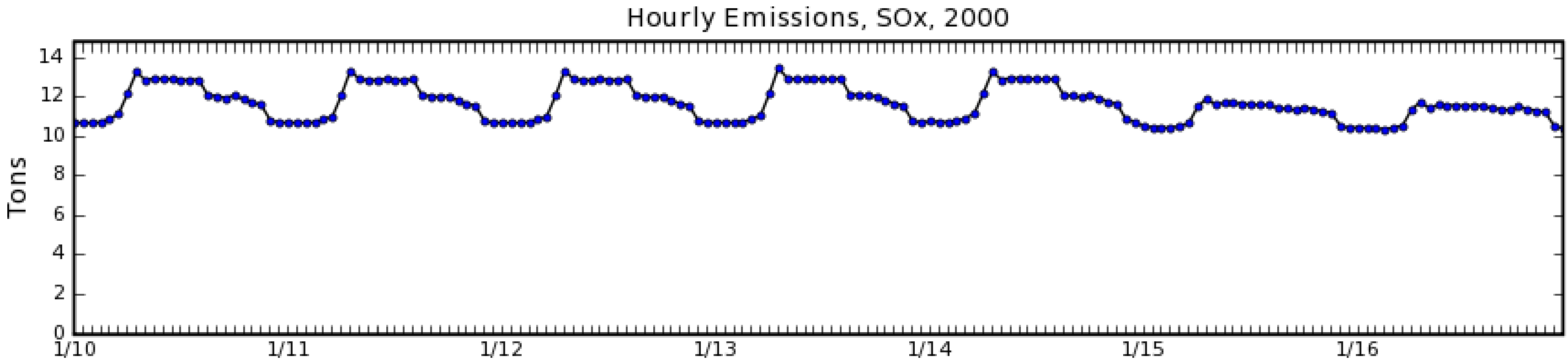
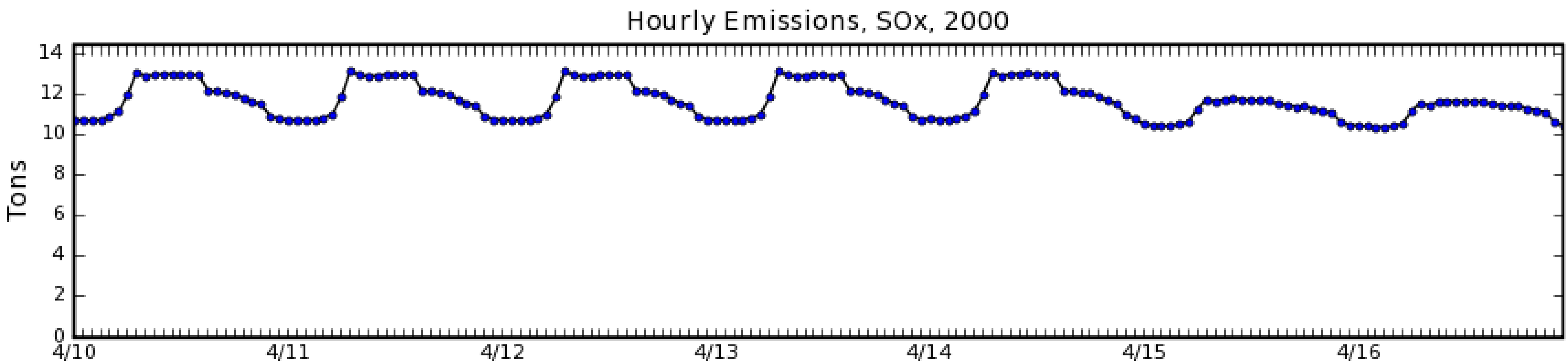
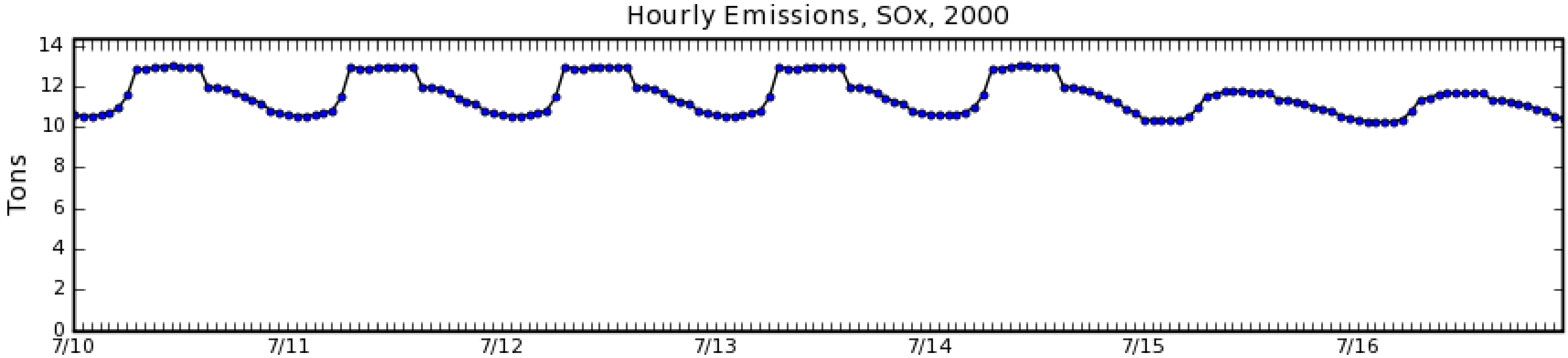
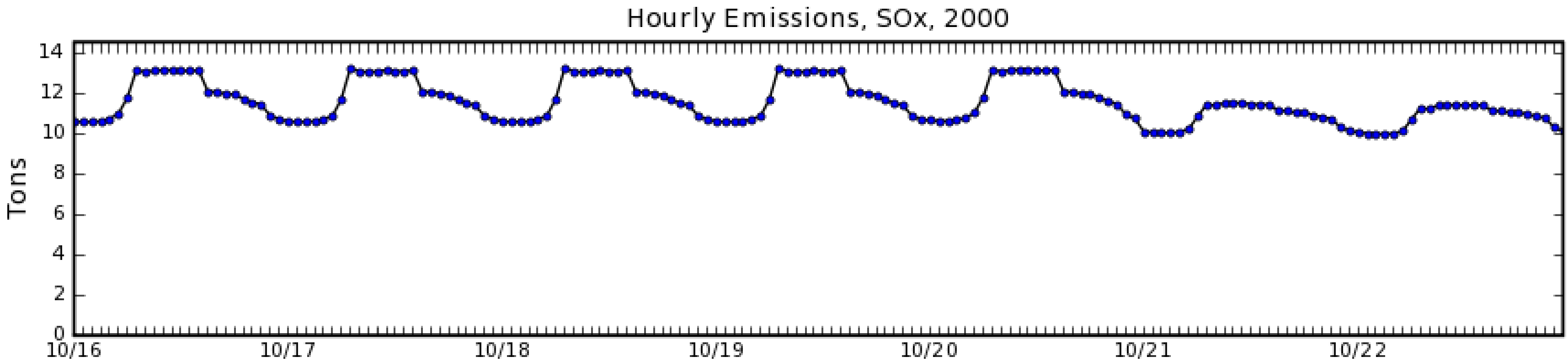

Hourly Emissions, PM25, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

**Figure 3.63.  Daily Emissions of SOx in 2000**

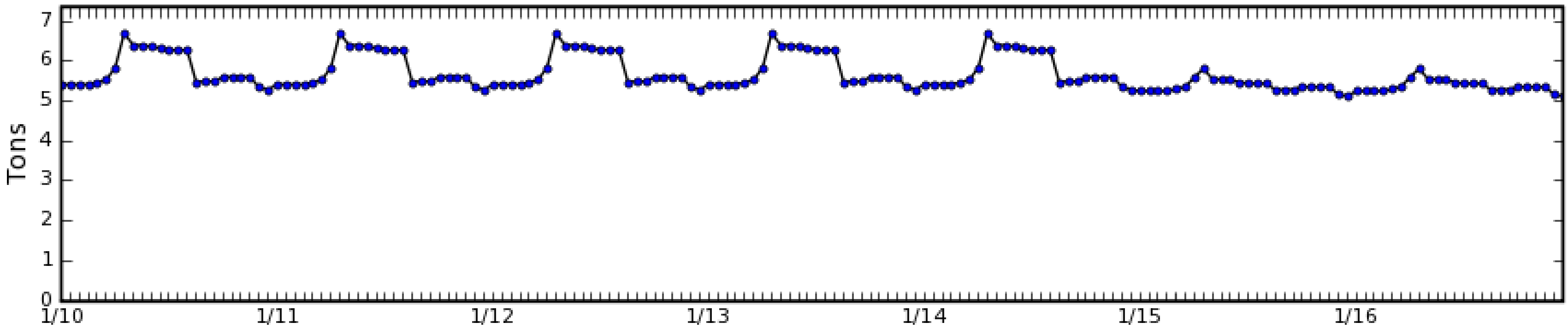


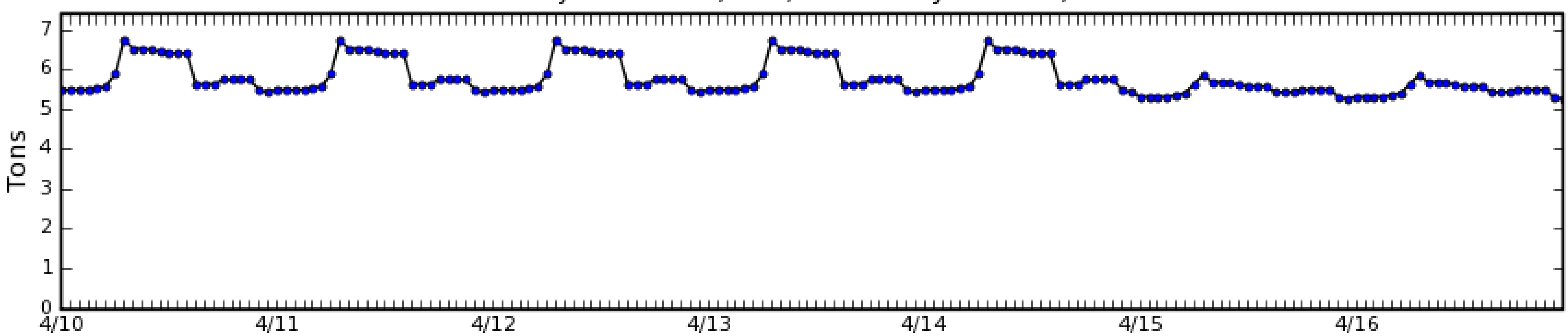

Hourly Emissions, SOx, 2000
Tons
14
12
10
8
6
4
2
0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

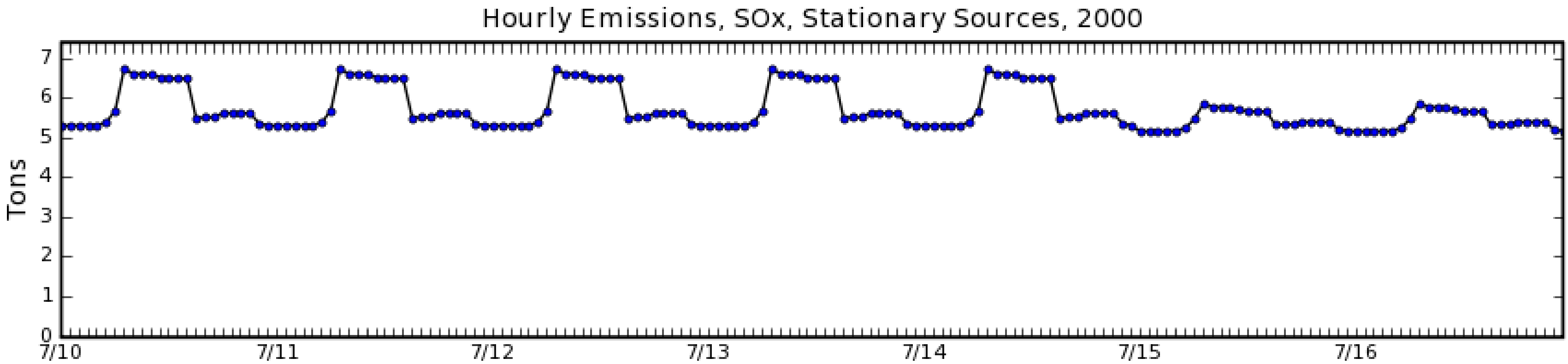

Hourly Emissions, SOx, 2000
Tons
14
12
10
8
6
4
2
0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

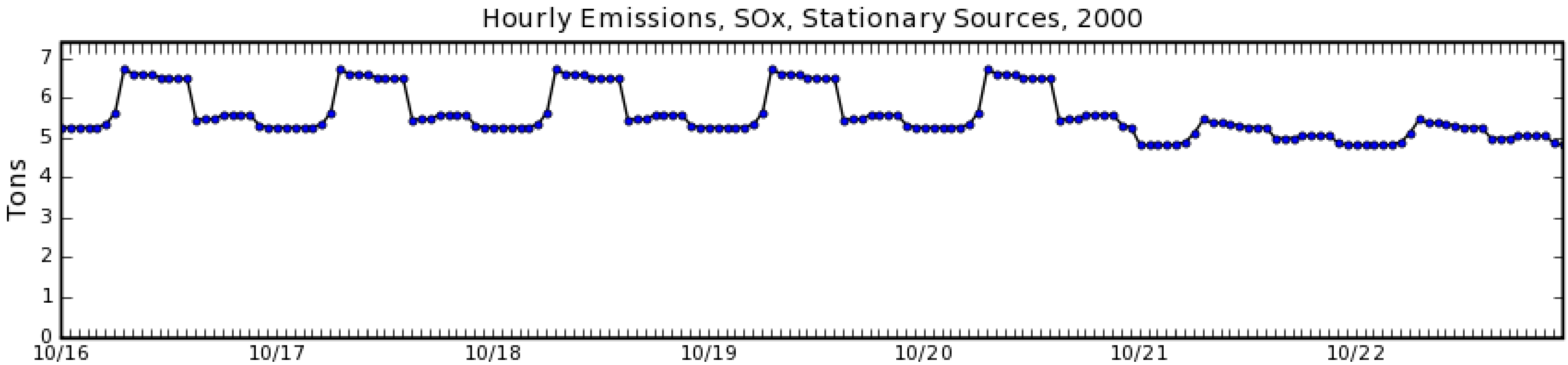
Hourly Emissions, SOx, Stationary Sources, 2000

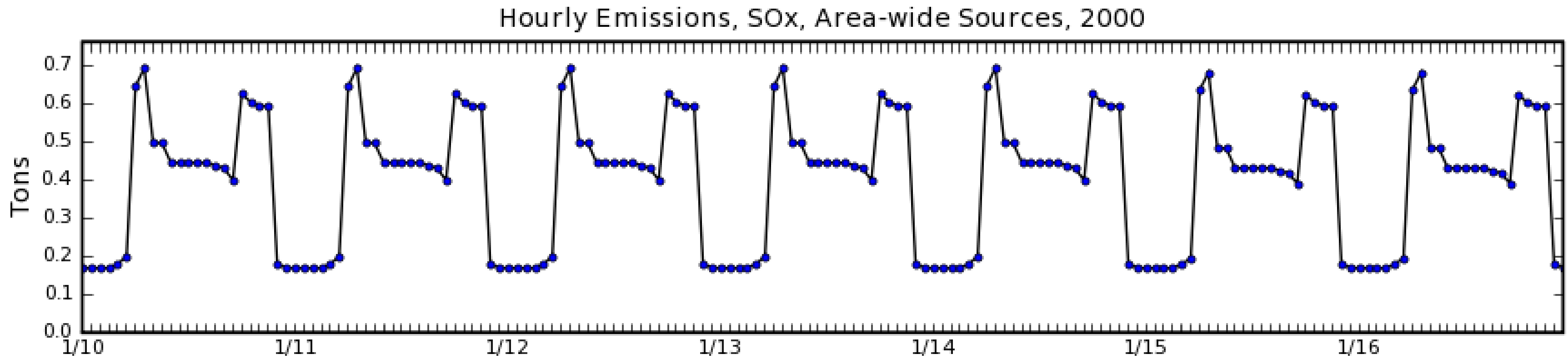


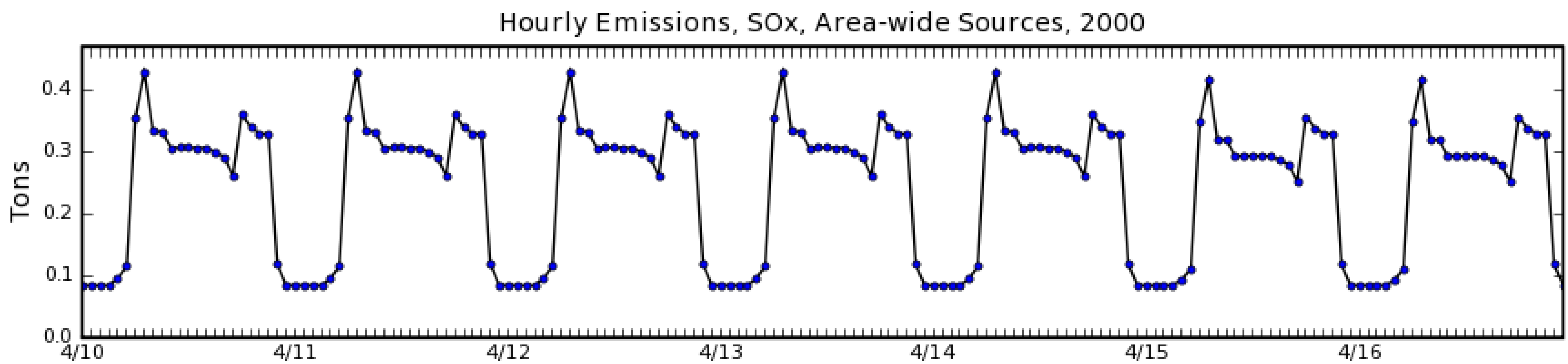

Hourly Emissions, SOx, Stationary Sources, 2000

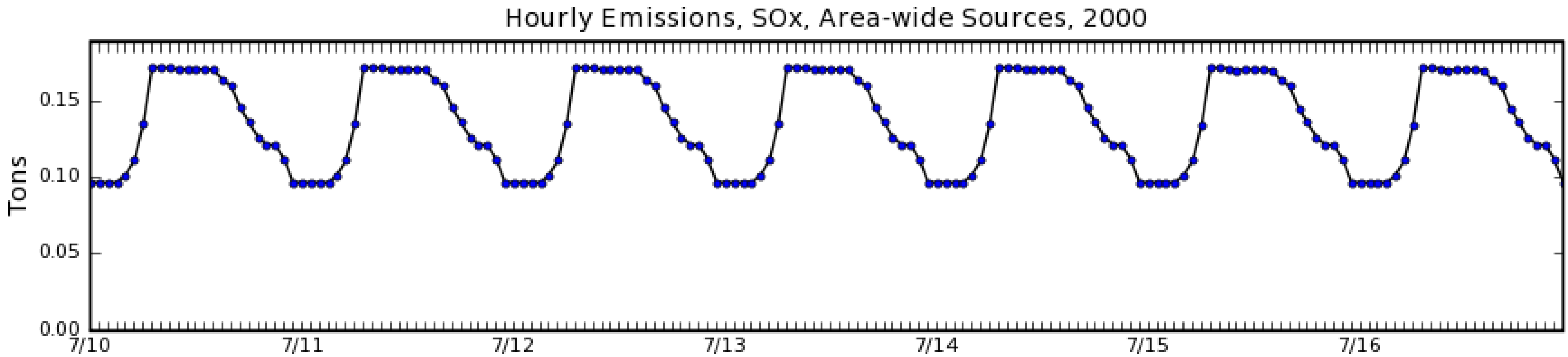


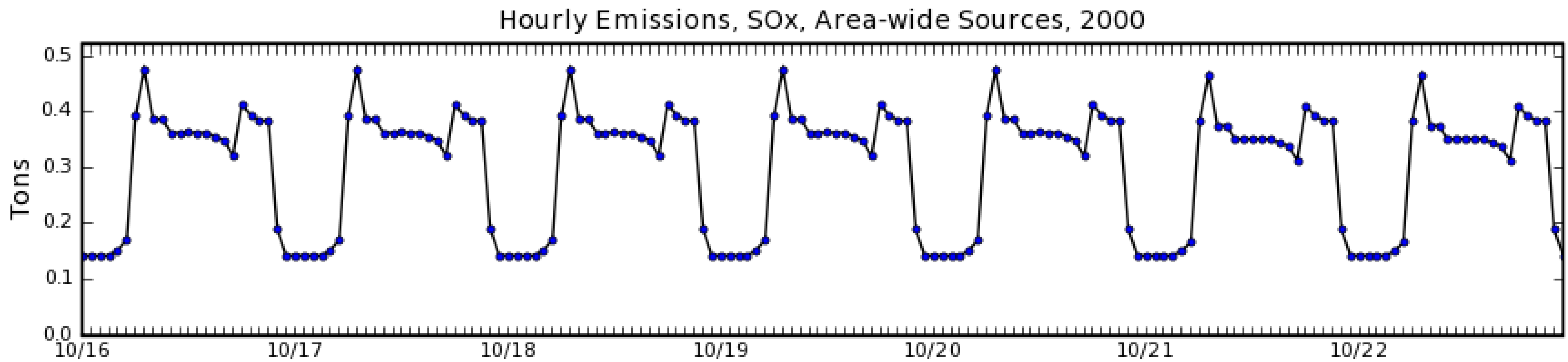

Hourly Emissions, SOx, Stationary Sources, 2000
Tons
0
1
2
3
4
5
6
7
7/10
7/11
7/12
7/13
7/14
7/15
7/16

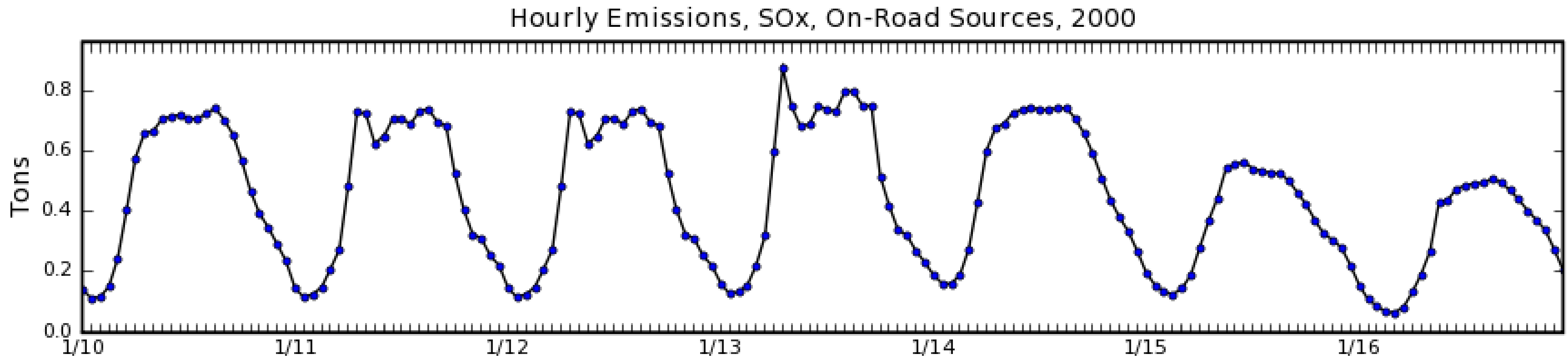

Hourly Emissions, SOx, Stationary Sources, 2000
Tons
0
1
2
3
4
5
6
7
10/16
10/17
10/18
10/19
10/20
10/21
10/22

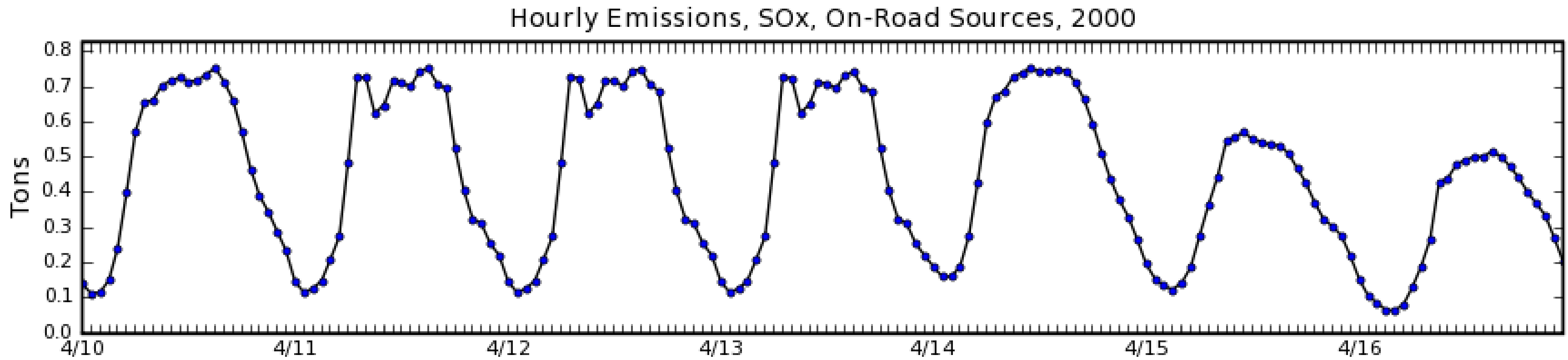

Hourly Emissions, SOx, Area-wide Sources, 2000
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1/10
1/11
1/12
1/13
1/14
1/15
1/16

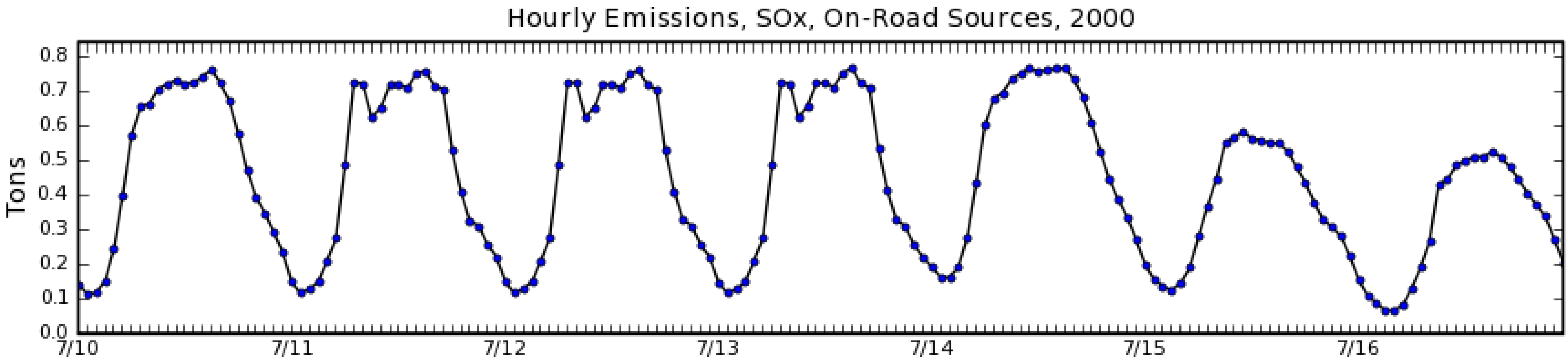

Hourly Emissions, SOx, Area-wide Sources, 2000
Tons
0.0
0.1
0.2
0.3
0.4
4/10
4/11
4/12
4/13
4/14
4/15
4/16

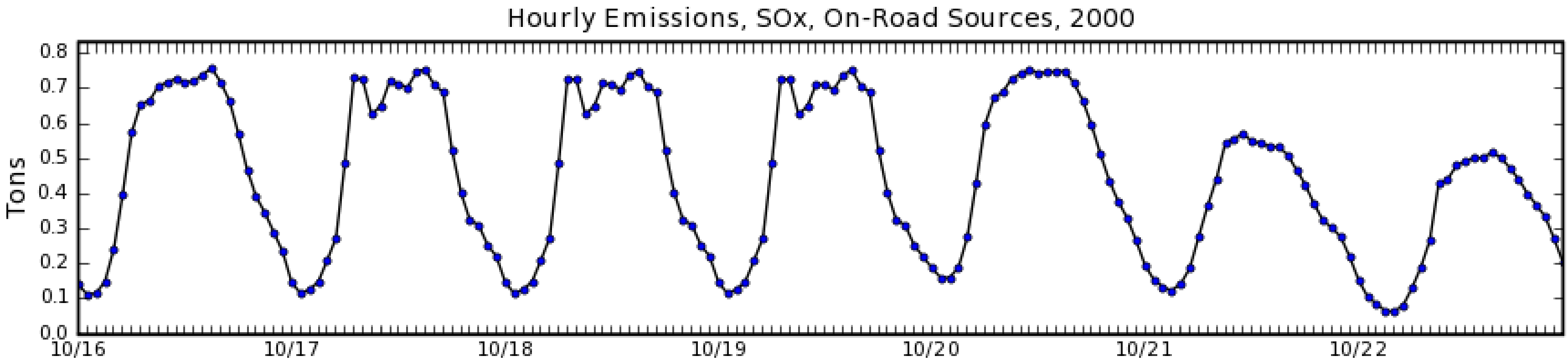

Hourly Emissions, SOx, Area-wide Sources, 2000
Tons
0.00
0.05
0.10
0.15
7/10
7/11
7/12
7/13
7/14
7/15
7/16

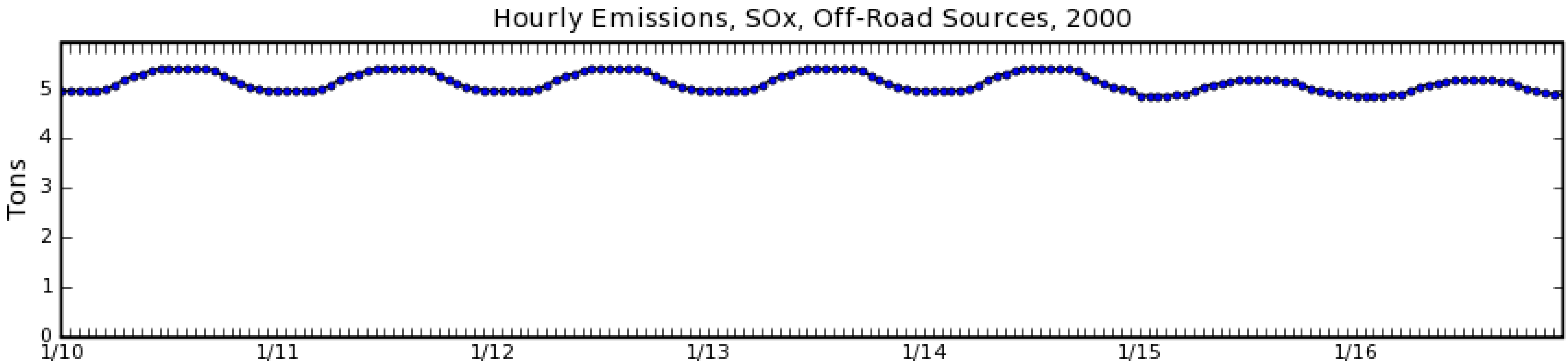

Hourly Emissions, SOx, Area-wide Sources, 2000
Tons
0.0
0.1
0.2
0.3
0.4
0.5
10/16
10/17
10/18
10/19
10/20
10/21
10/22

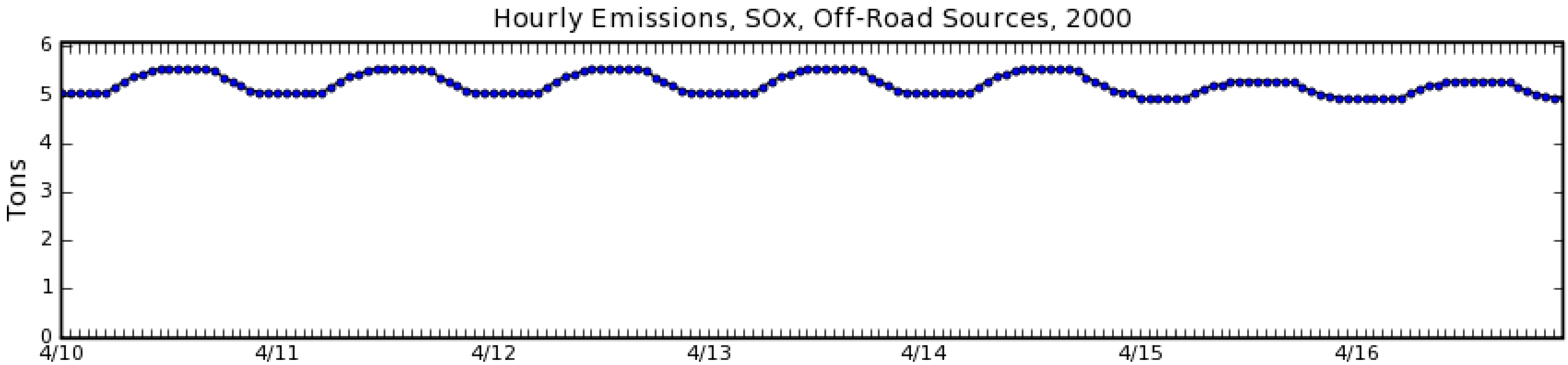

Hourly Emissions, SOx, On-Road Sources, 2000
Tons
0.0
0.2
0.4
0.6
0.8
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, SOx, On-Road Sources, 2000
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
4/10
4/11
4/12
4/13
4/14
4/15
4/16

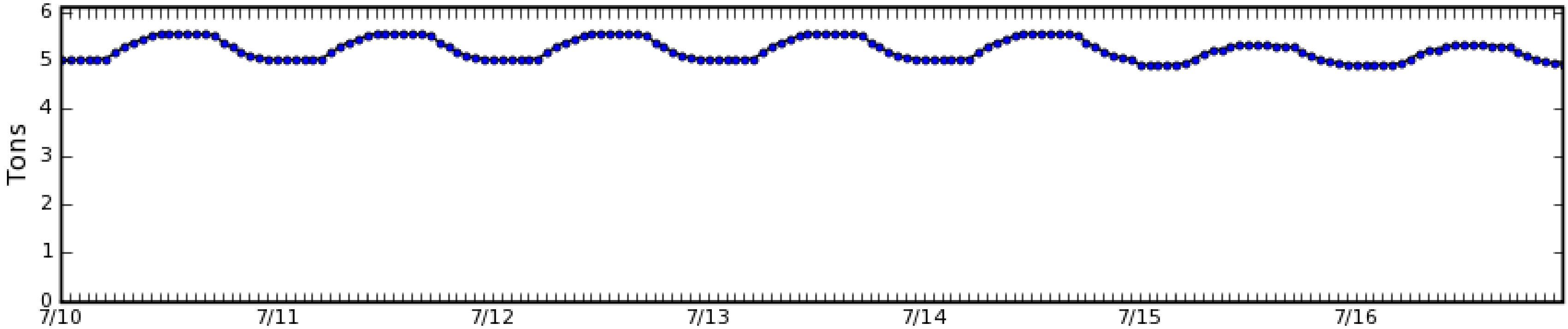

Hourly Emissions, SOx, On-Road Sources, 2000
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, SOx, On-Road Sources, 2000
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
10/16
10/17
10/18
10/19
10/20
10/21
10/22

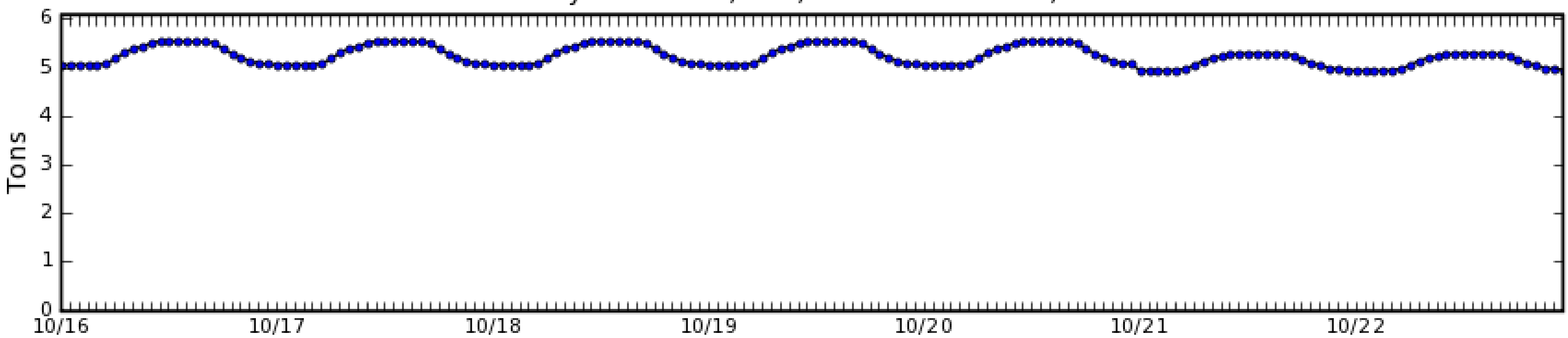

Hourly Emissions, SOx, Off-Road Sources, 2000
Tons
0
1
2
3
4
5
1/10
1/11
1/12
1/13
1/14
1/15
1/16

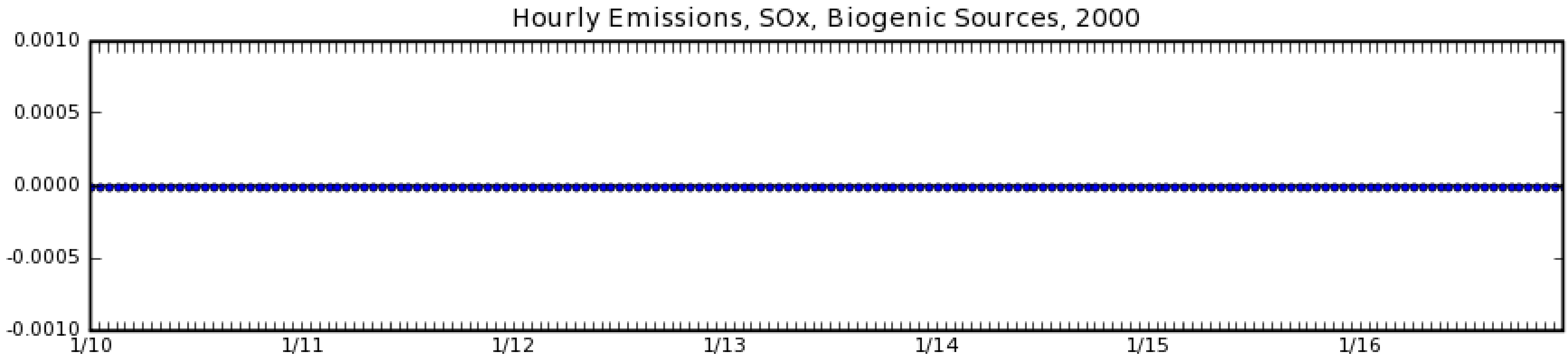

Hourly Emissions, SOx, Off-Road Sources, 2000
Tons
0
1
2
3
4
5
6
4/10
4/11
4/12
4/13
4/14
4/15
4/16

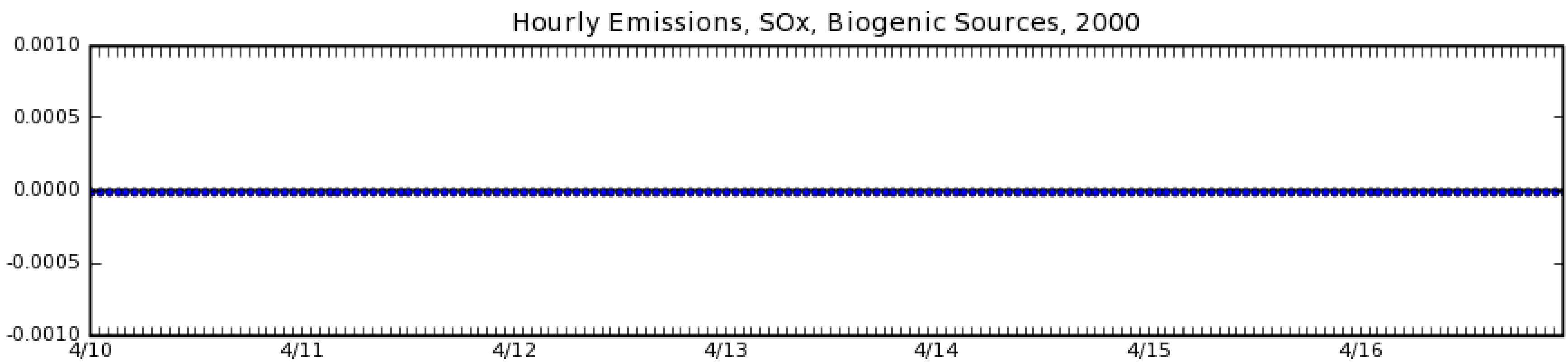
Hourly Emissions, SOx, Off-Road Sources, 2000

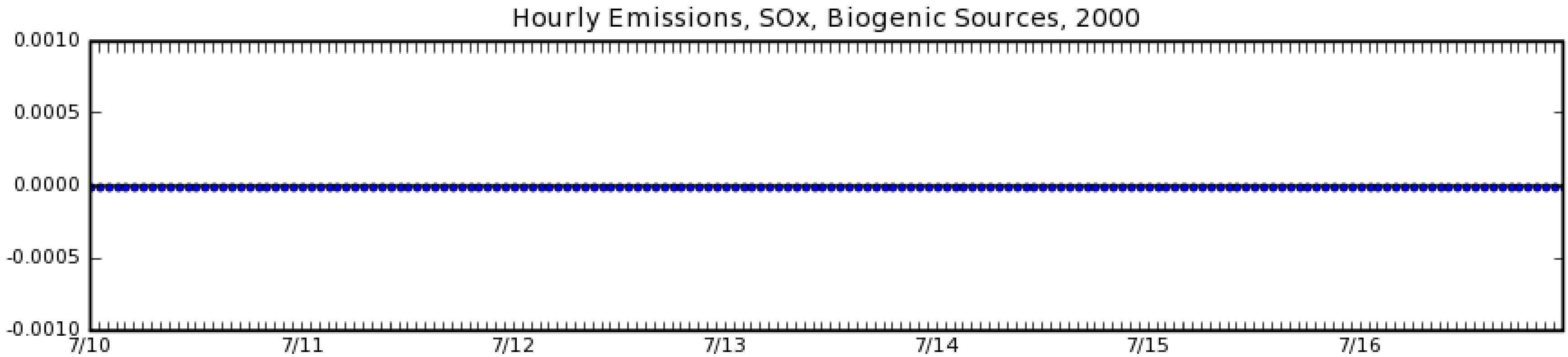



Hourly Emissions, SOx, Off-Road Sources, 2000




Hourly Emissions, SOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, SOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, SOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

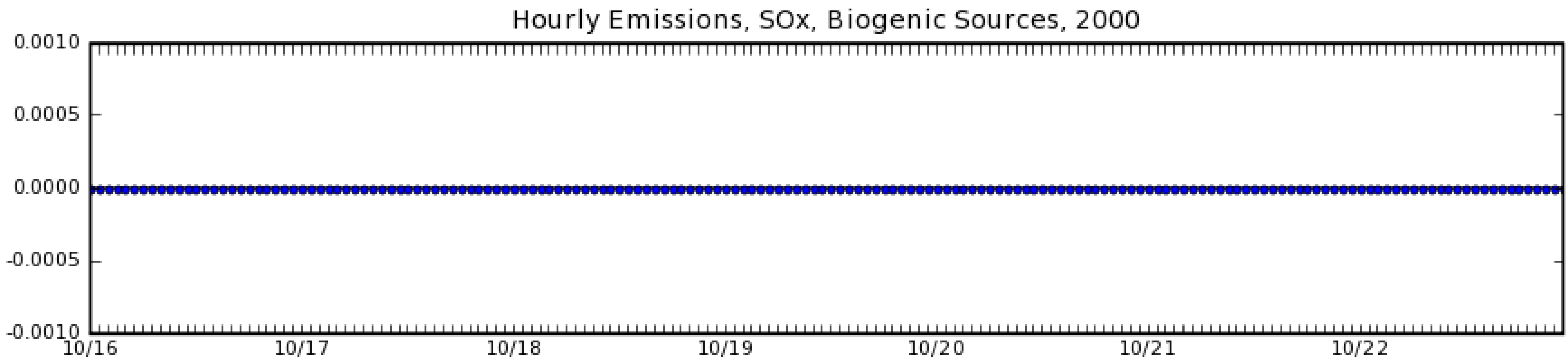
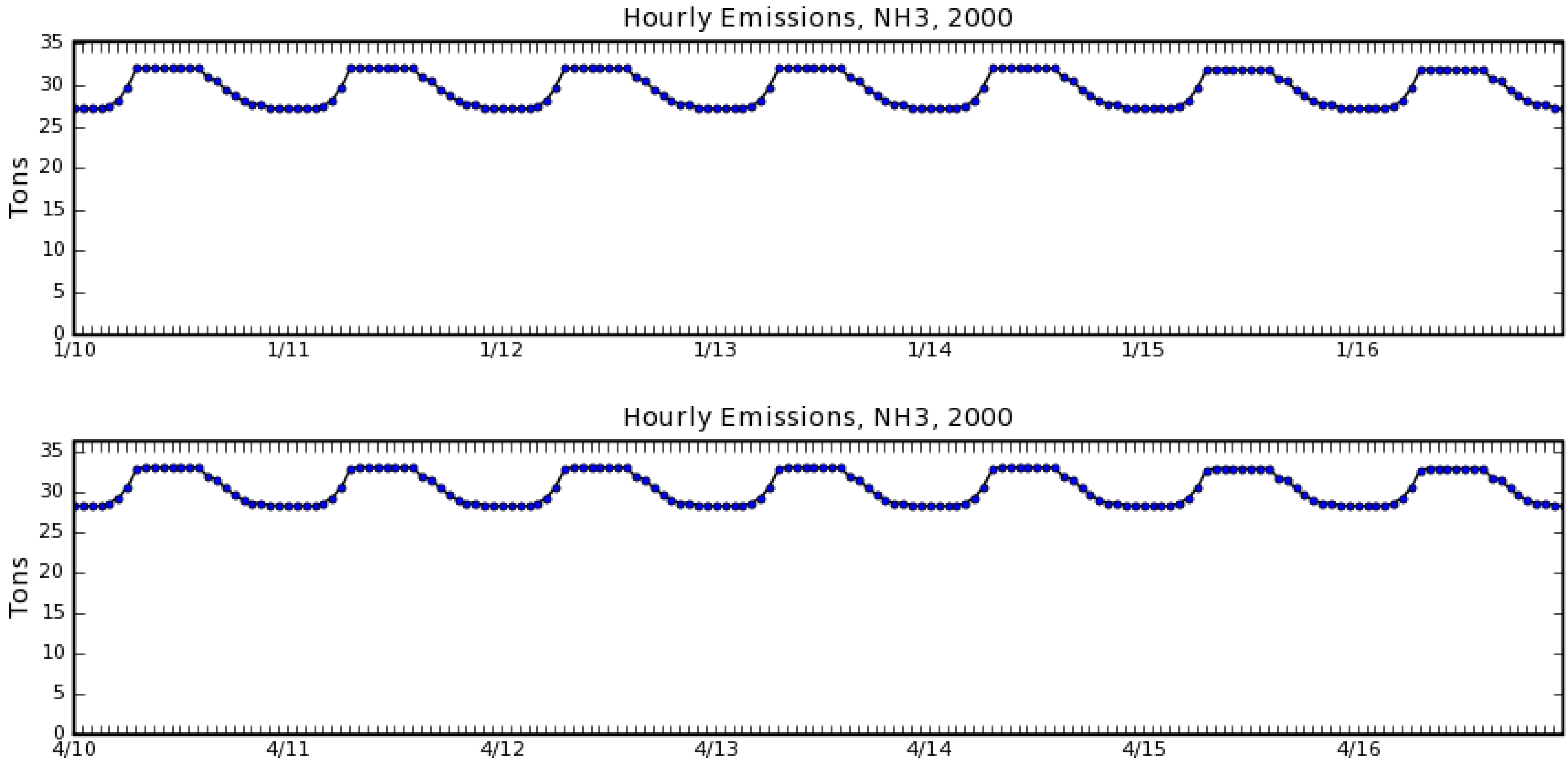
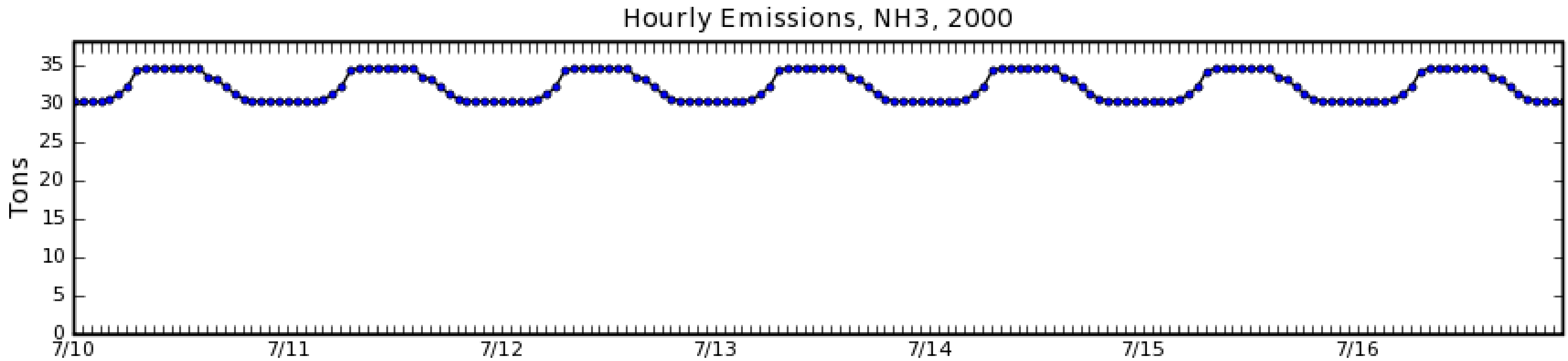
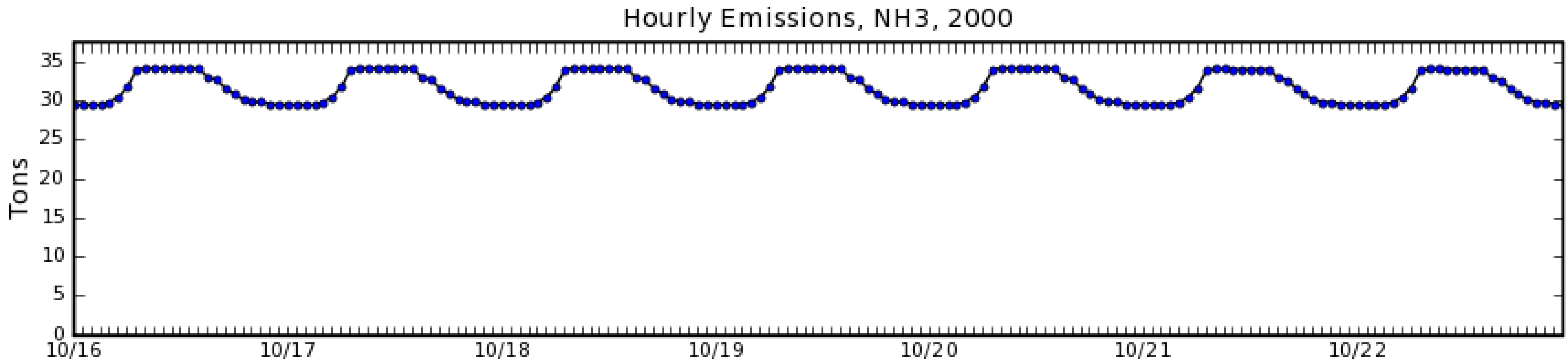

Hourly Emissions, SOx, Biogenic Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

**Figure 3.64.  Daily Emissions of NH3 in 2000**

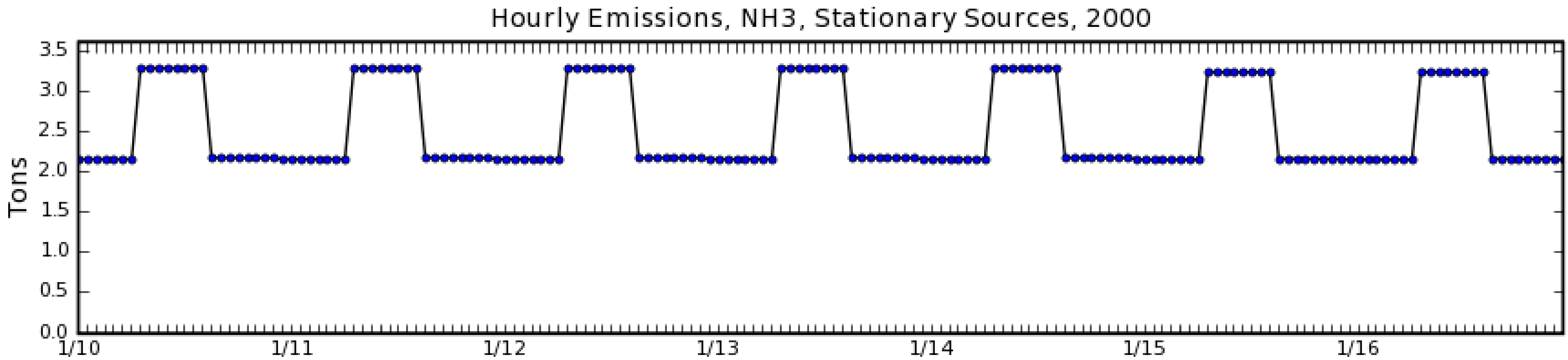


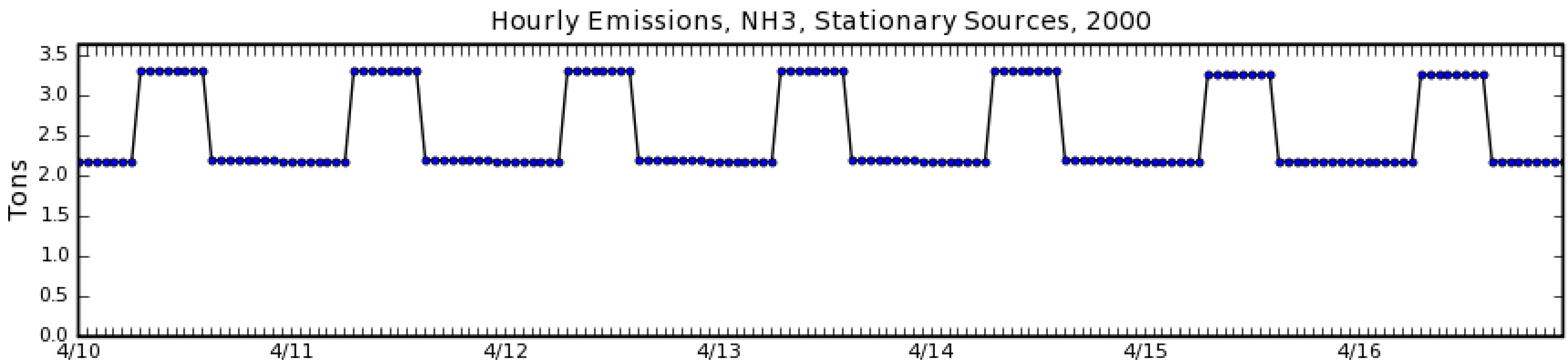


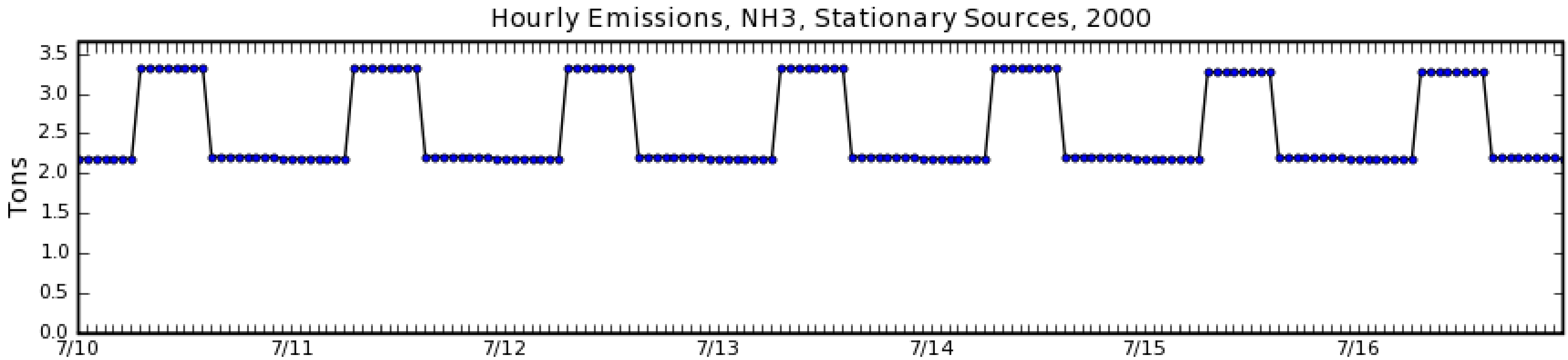
Hourly Emissions, NH3, 2000
Tons
0
5
10
15
20
25
30
35
7/10
7/11
7/12
7/13
7/14
7/15
7/16

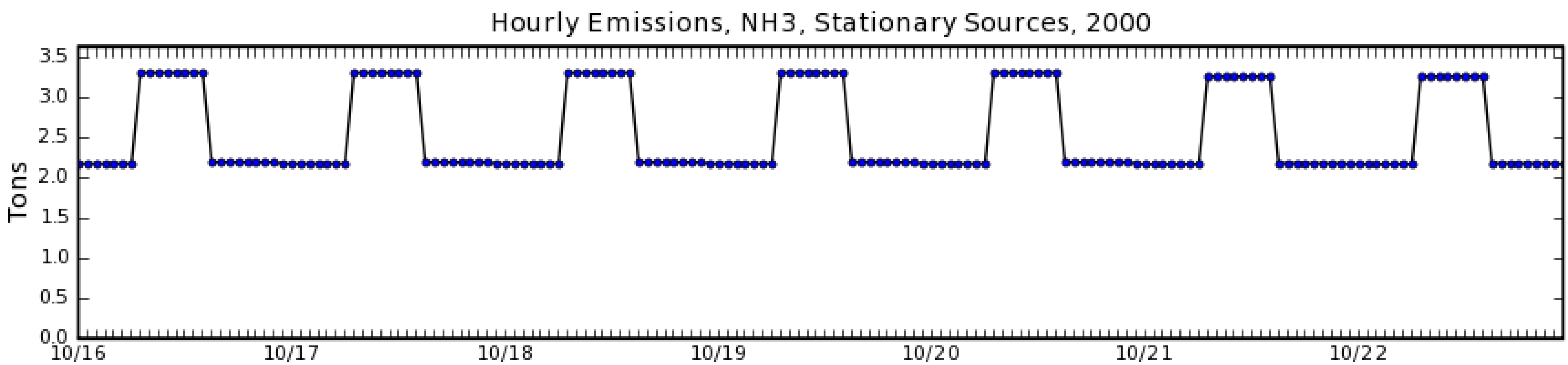
Hourly Emissions, NH3, 2000
Tons
0
5
10
15
20
25
30
35
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NH3, Stationary Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

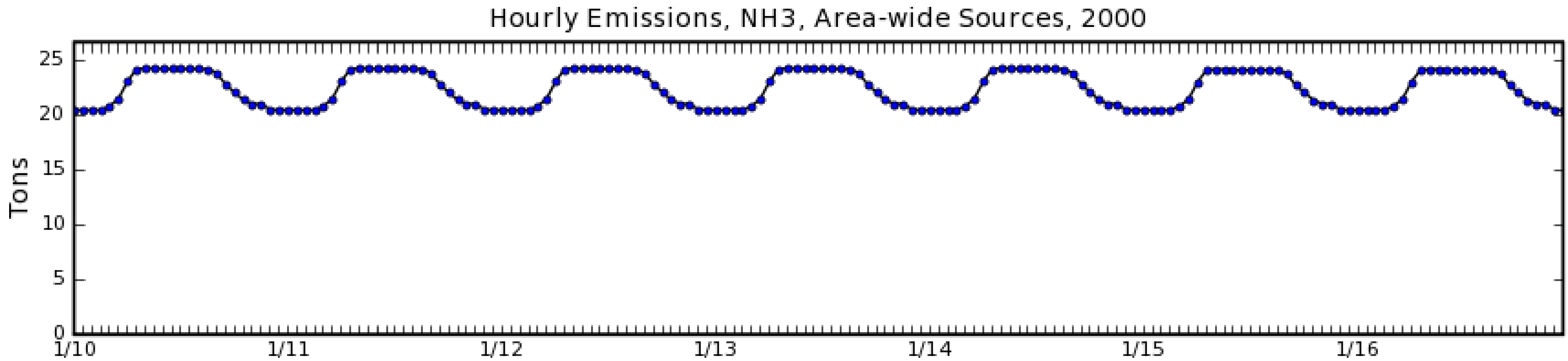

Hourly Emissions, NH3, Stationary Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

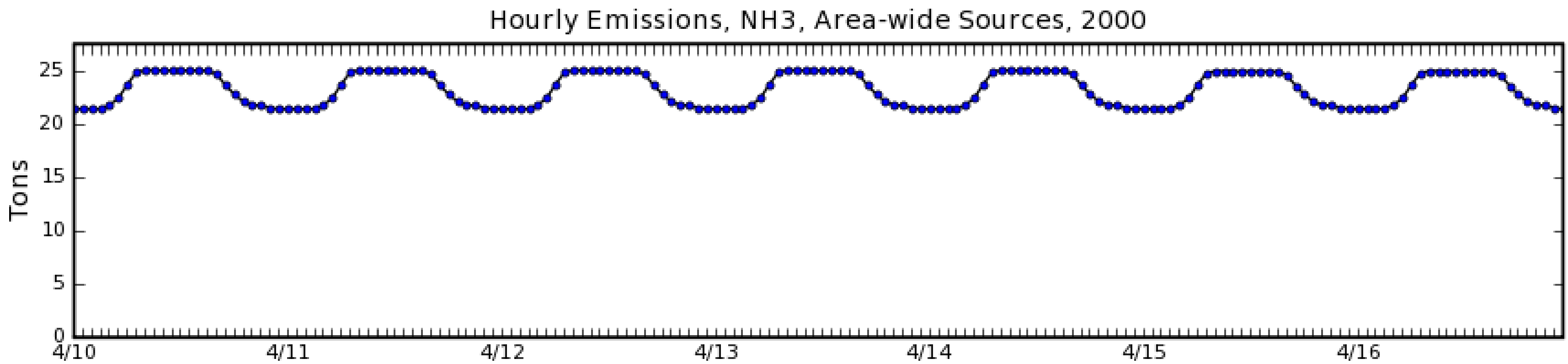


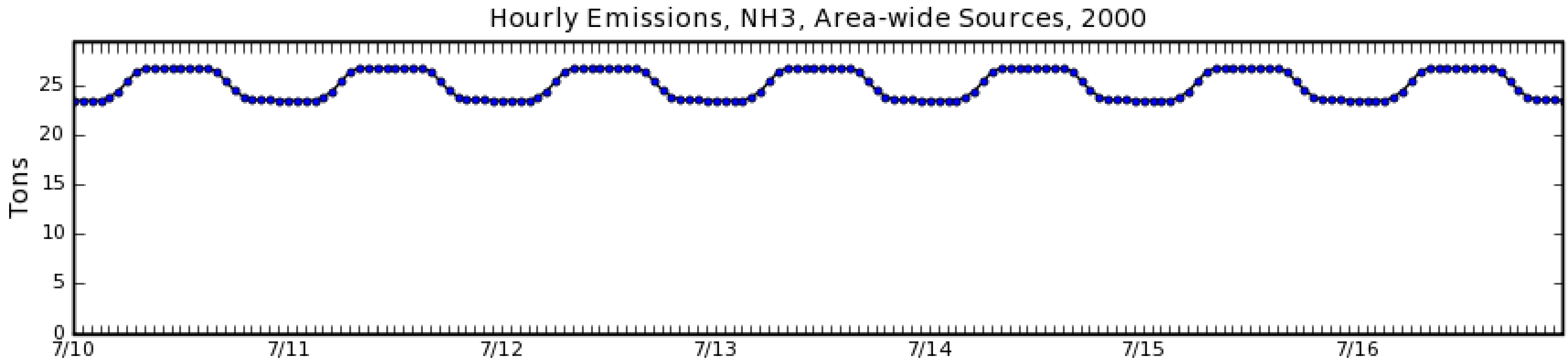
Hourly Emissions, NH3, Stationary Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

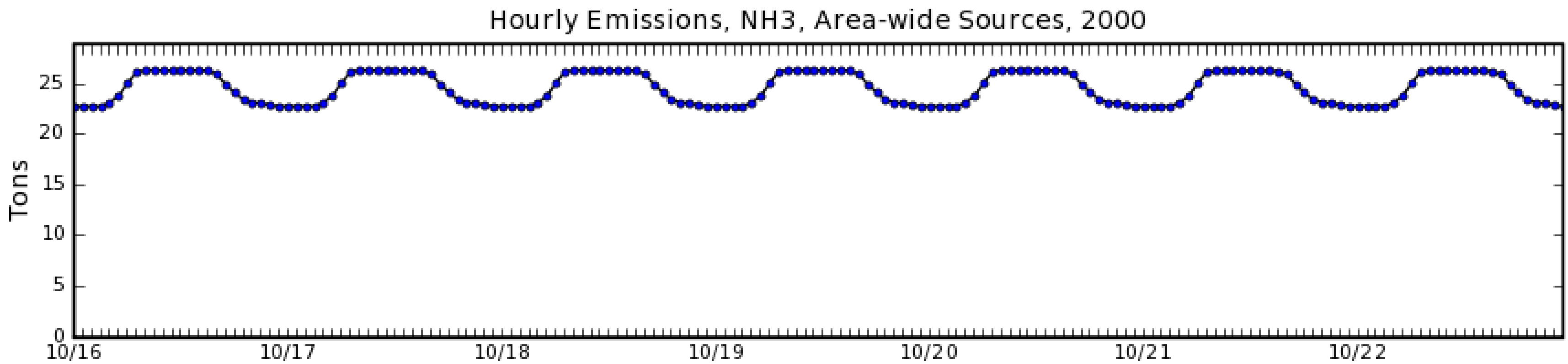



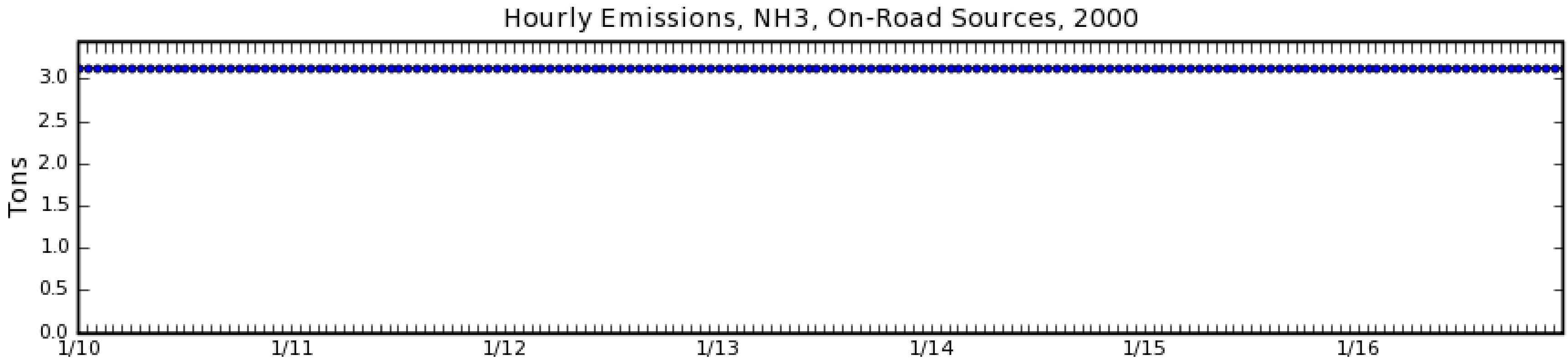
Hourly Emissions, NH3, Stationary Sources, 2000
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

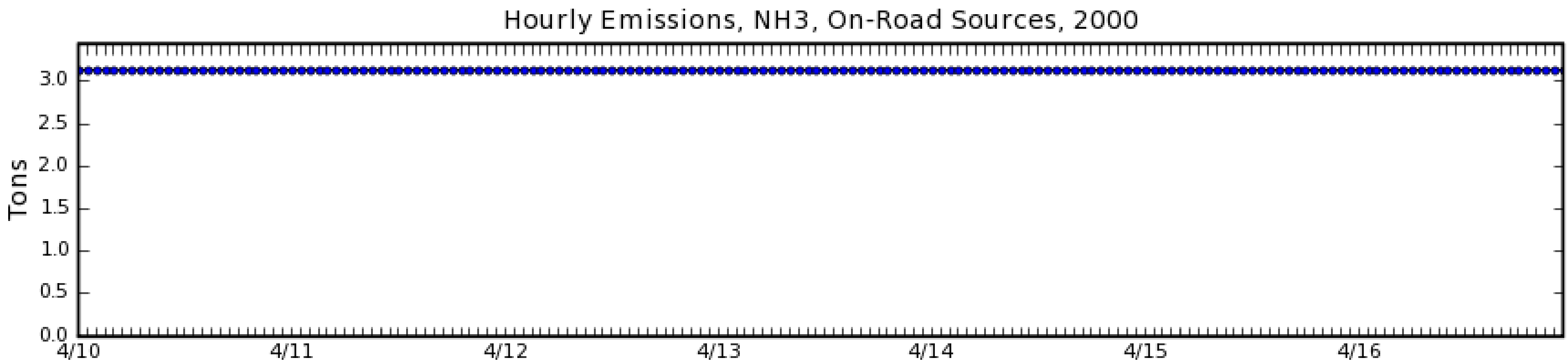

Hourly Emissions, NH3, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
1/10
1/11
1/12
1/13
1/14
1/15
1/16

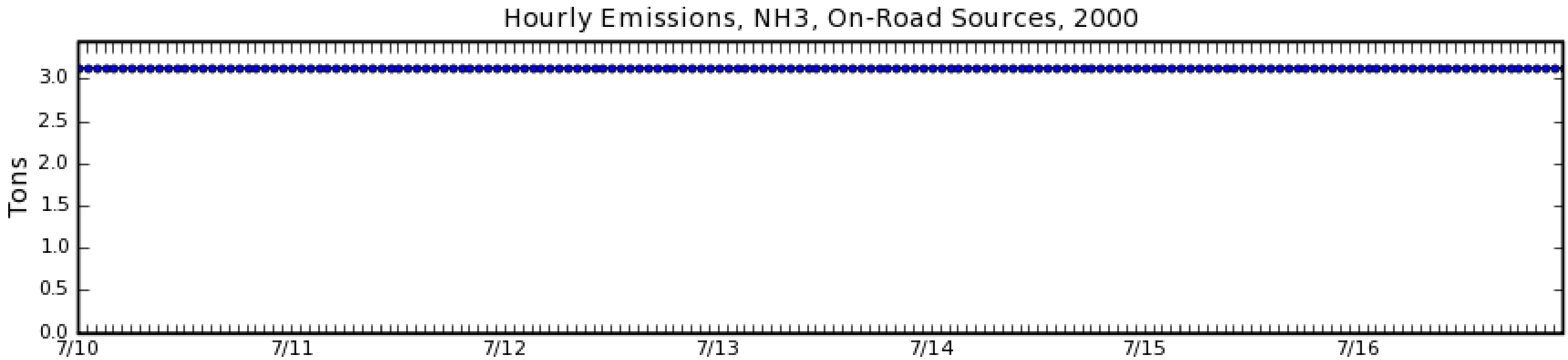

Hourly Emissions, NH3, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
4/10
4/11
4/12
4/13
4/14
4/15
4/16

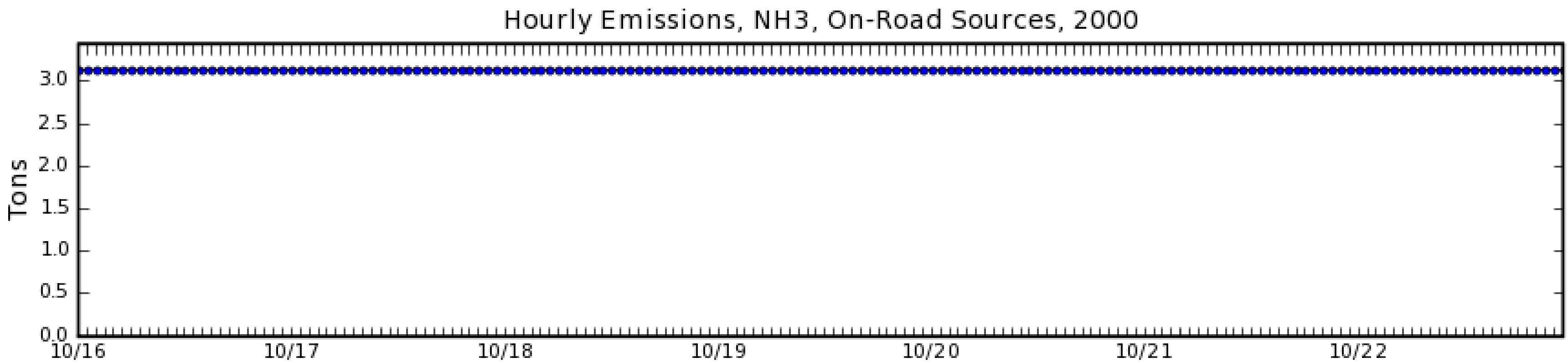

Hourly Emissions, NH3, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
7/10
7/11
7/12
7/13
7/14
7/15
7/16

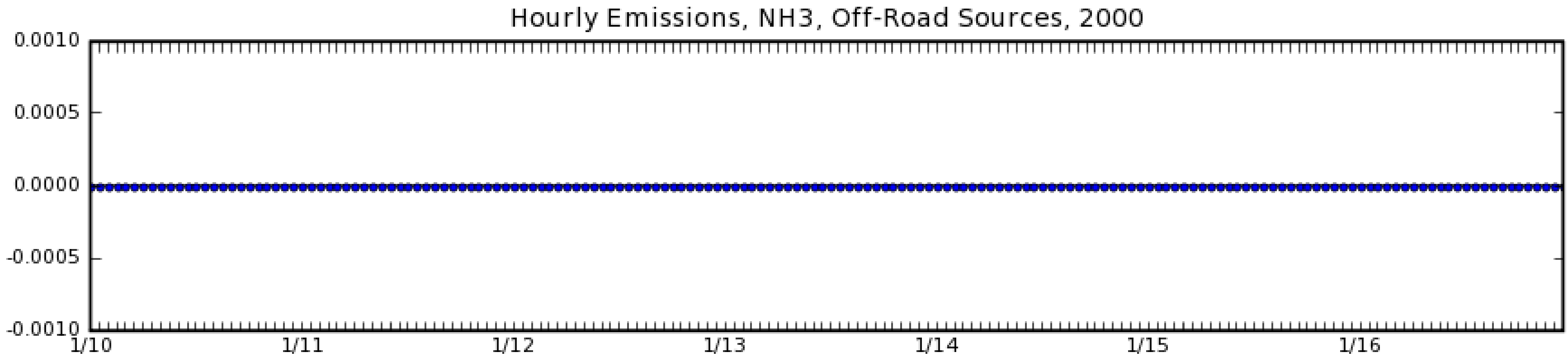

Hourly Emissions, NH3, Area-wide Sources, 2000
Tons
0
5
10
15
20
25
10/16
10/17
10/18
10/19
10/20
10/21
10/22

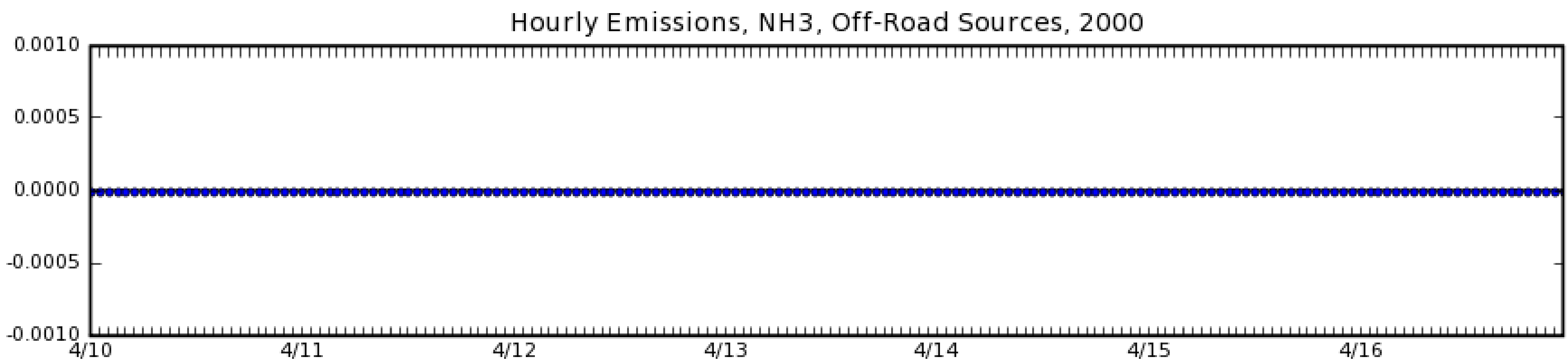

Hourly Emissions, NH3, On-Road Sources, 2000
Tons
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

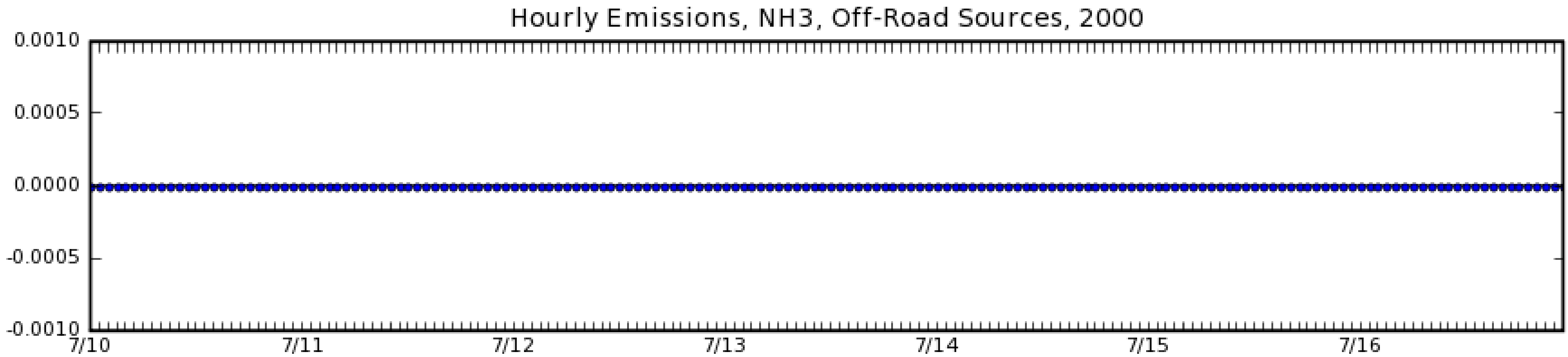

Hourly Emissions, NH3, On-Road Sources, 2000
Tons
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

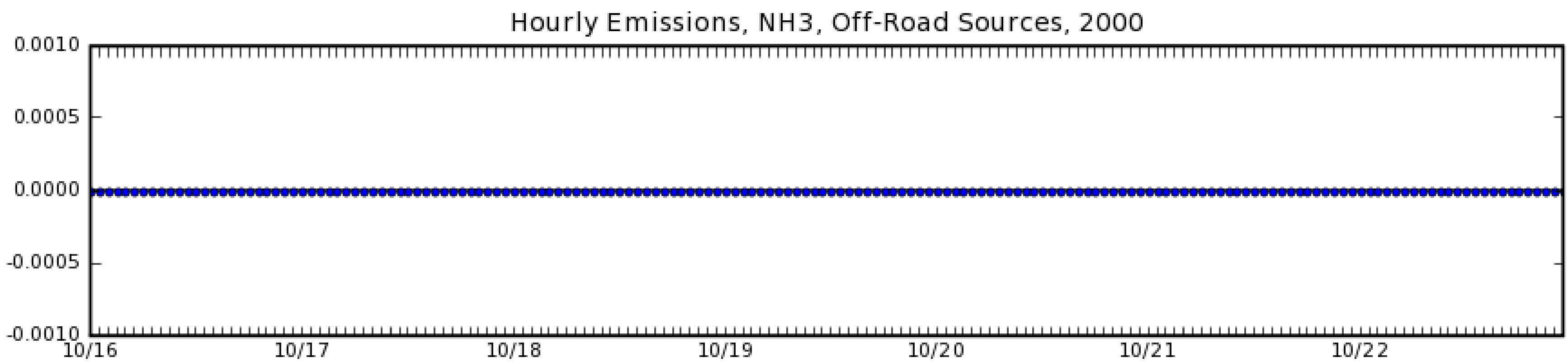

Hourly Emissions, NH3, On-Road Sources, 2000
Tons
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

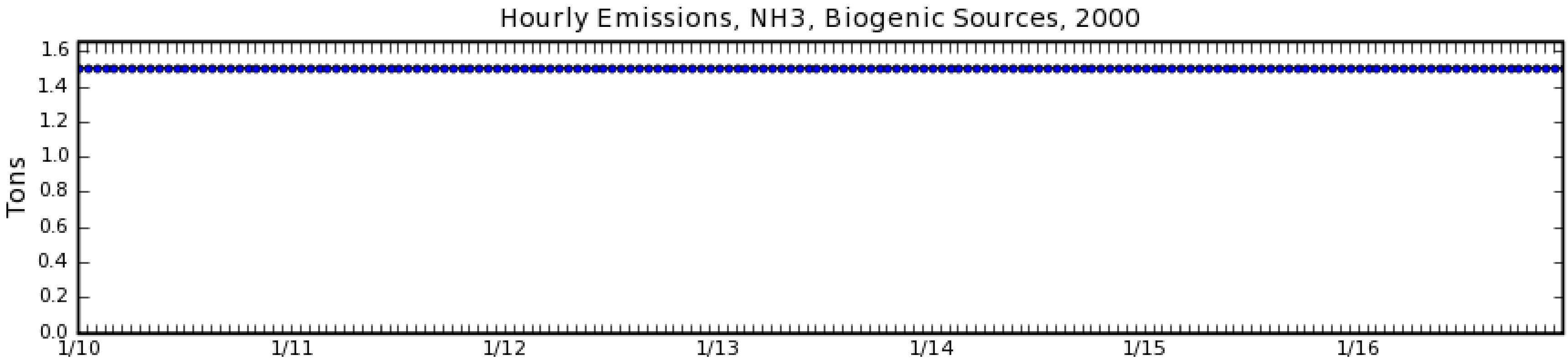

Hourly Emissions, NH3, On-Road Sources, 2000
Tons
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

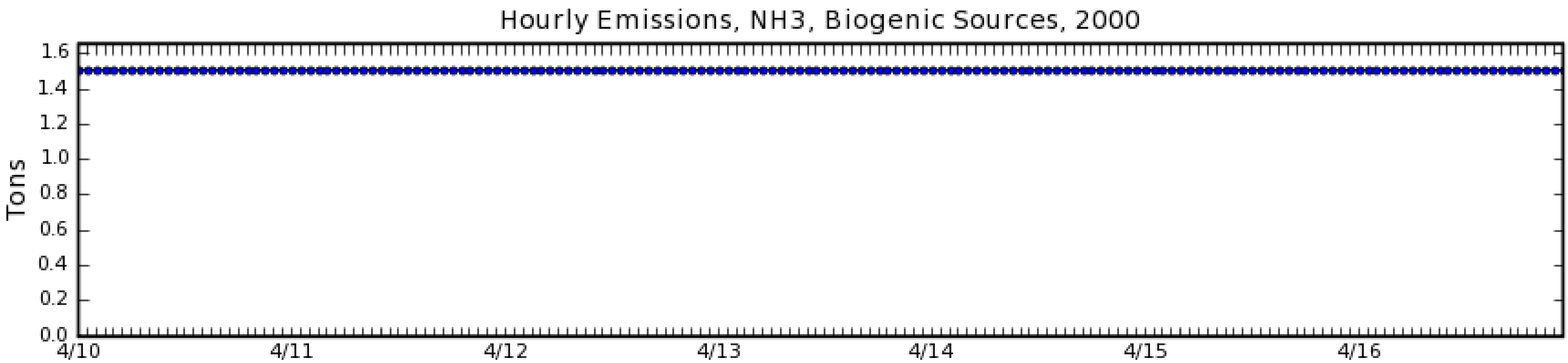

Hourly Emissions, NH3, Off-Road Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16

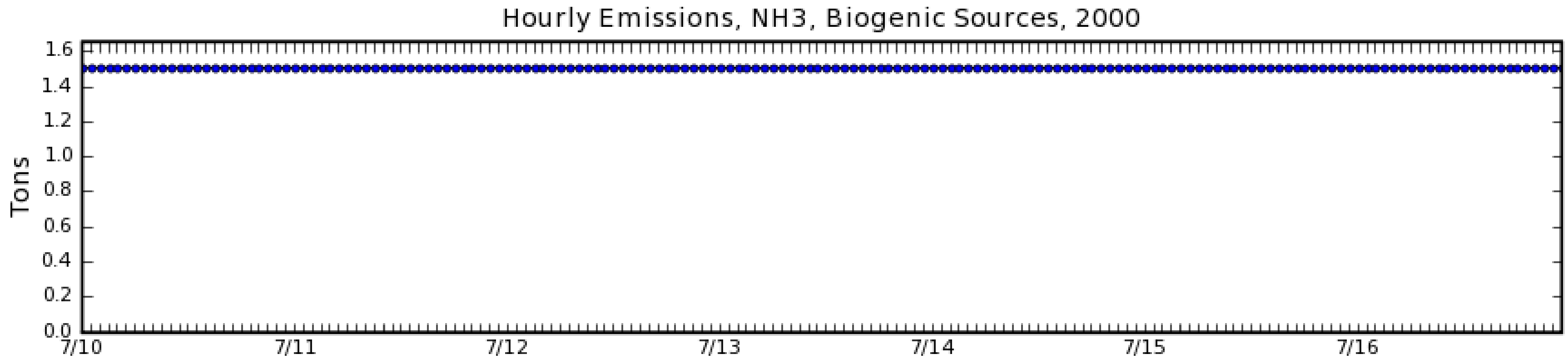

Hourly Emissions, NH3, Off-Road Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NH3, Off-Road Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, NH3, Off-Road Sources, 2000
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NH3, Biogenic Sources, 2000
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, NH3, Biogenic Sources, 2000
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NH3, Biogenic Sources, 2000
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

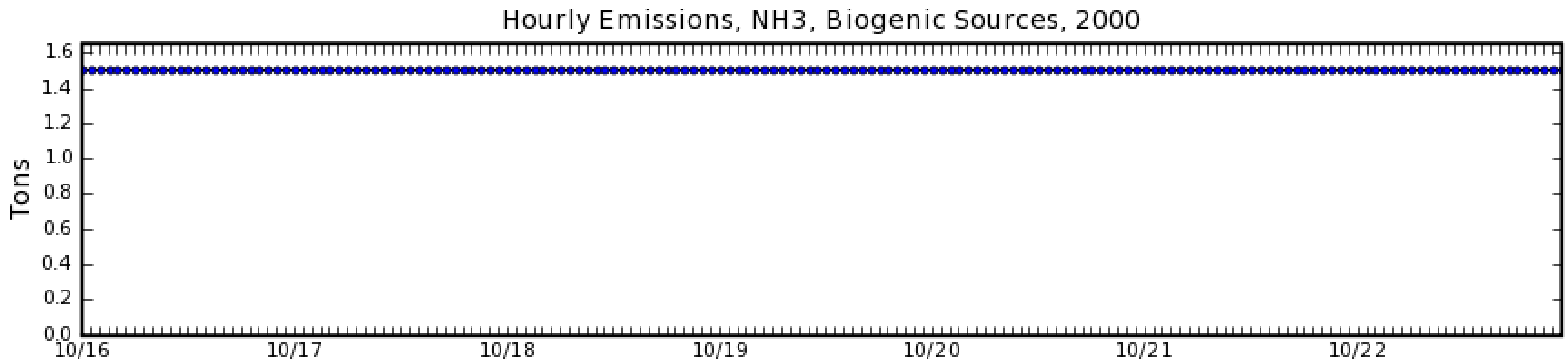
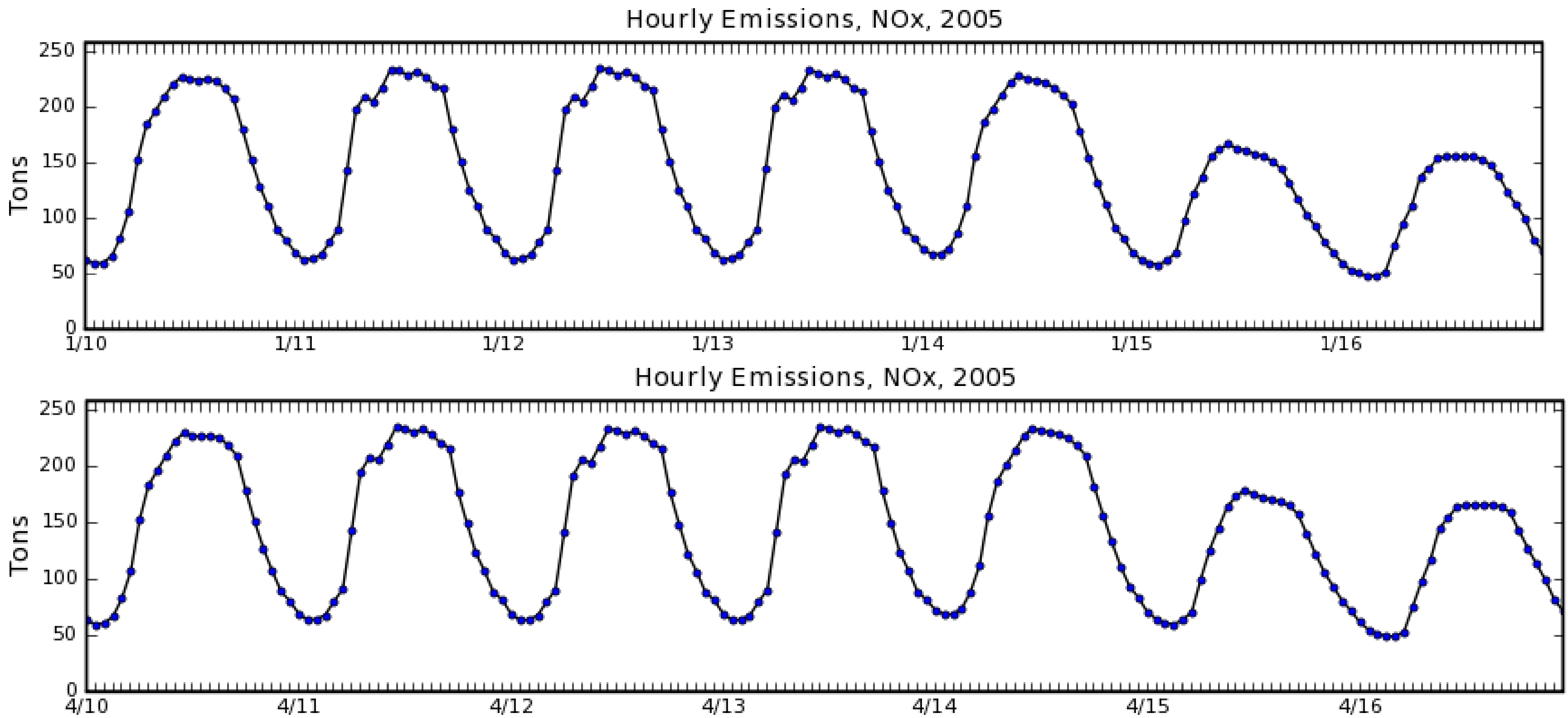
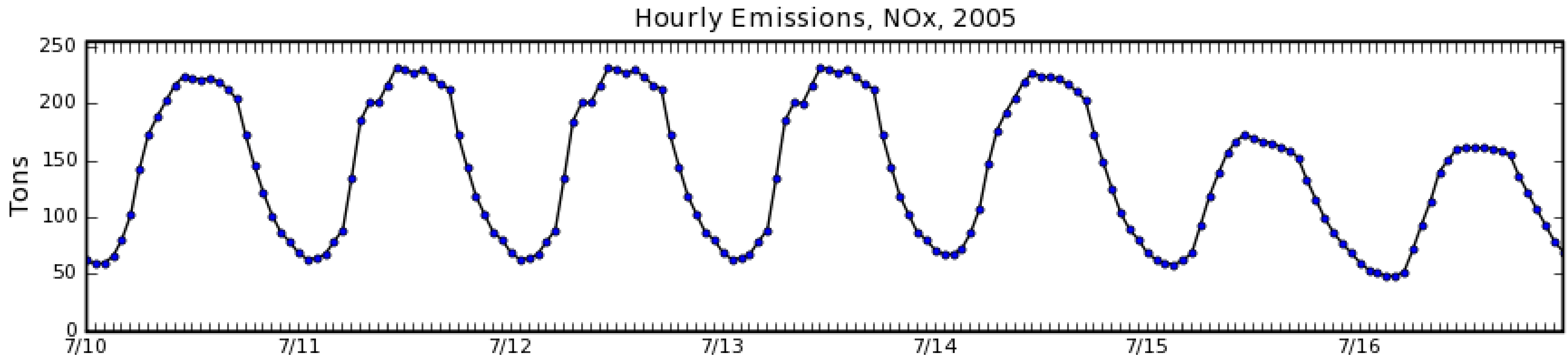
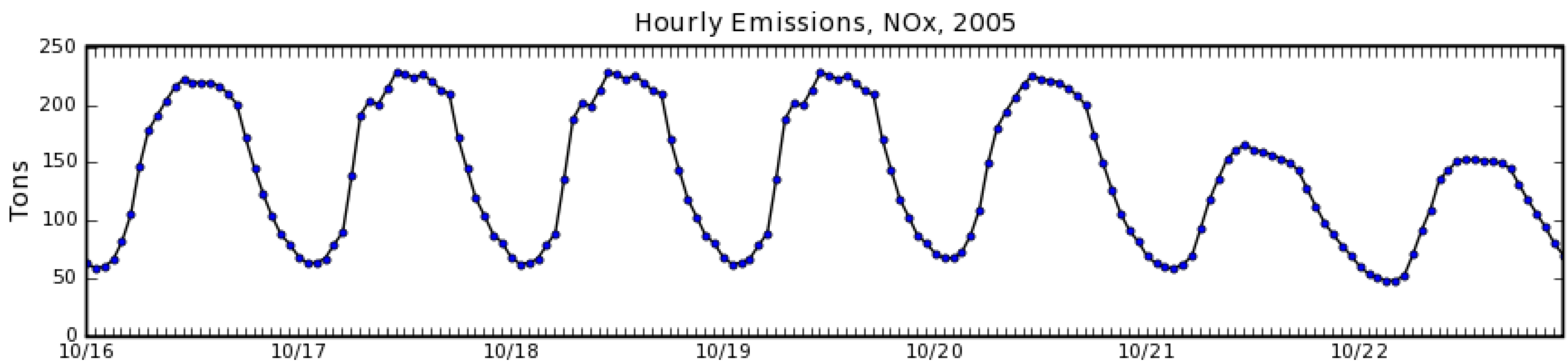
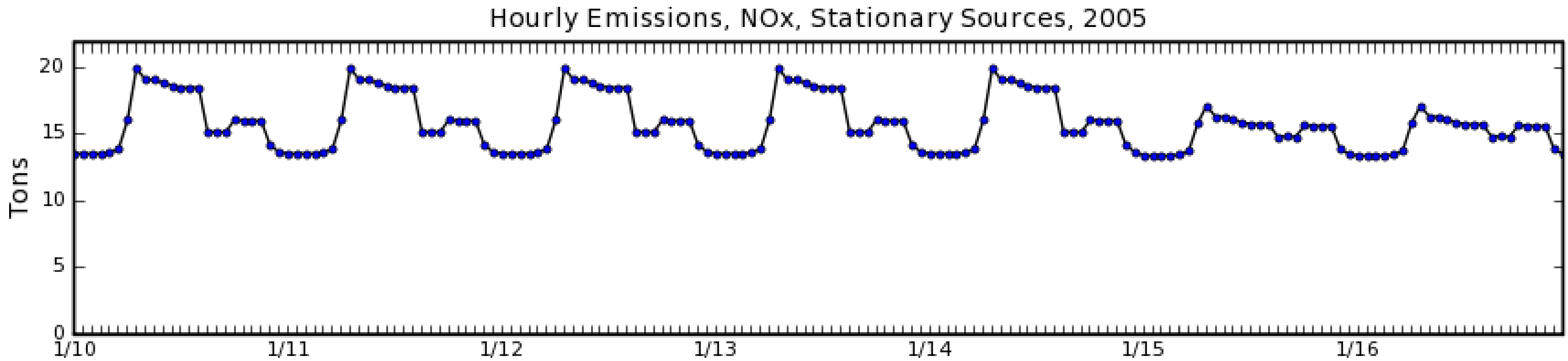

Hourly Emissions, NH3, Biogenic Sources, 2000
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

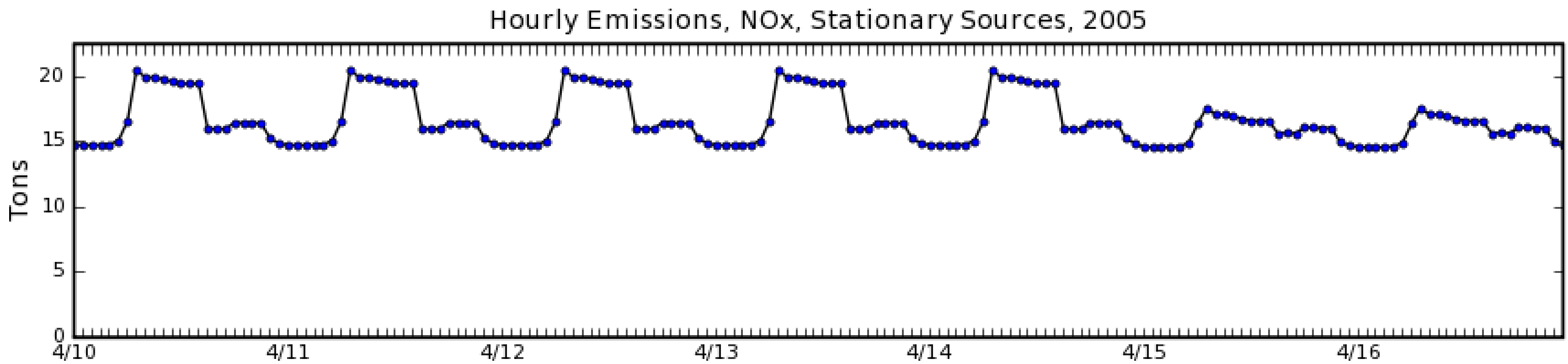
**Figure 3.65. Daily Emissions of NOx in 2005**

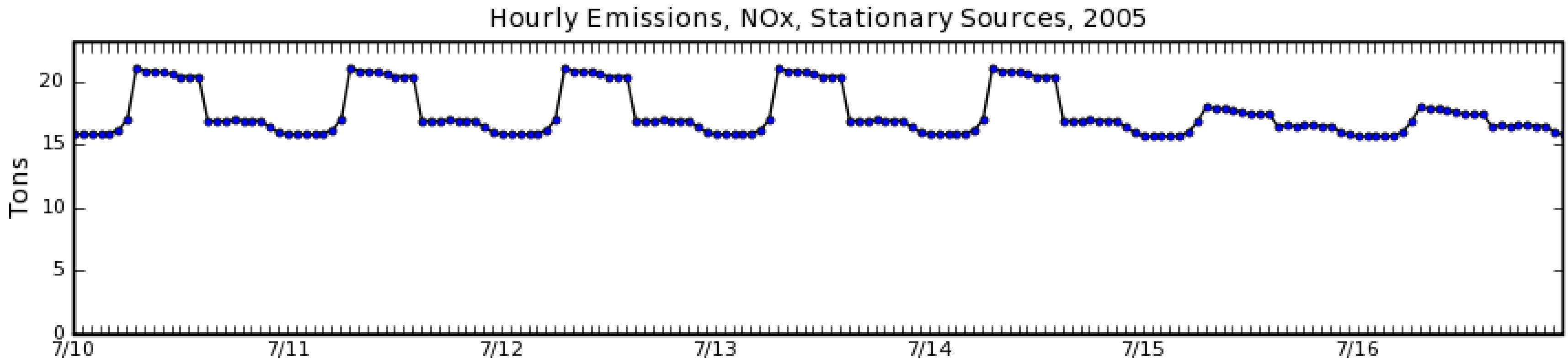



Hourly Emissions, NOx, 2005
Tons
0
50
100
150
200
250
7/10
7/11
7/12
7/13
7/14
7/15
7/16

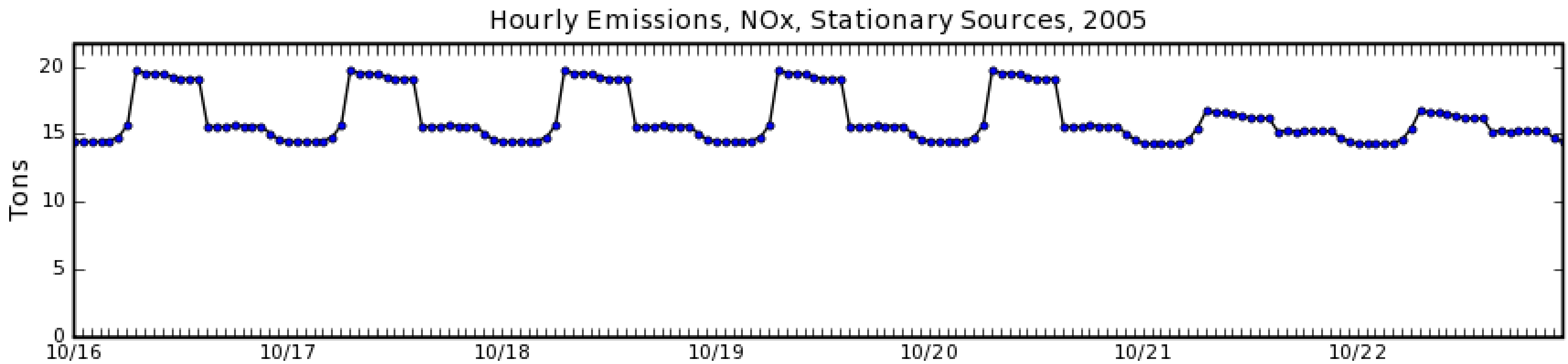

Hourly Emissions, NOx, 2005
Tons
0
50
100
150
200
250
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NOx, Stationary Sources, 2005
Tons
20
15
10
5
0
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, NOx, Stationary Sources, 2005
Tons
20
15
10
5
0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

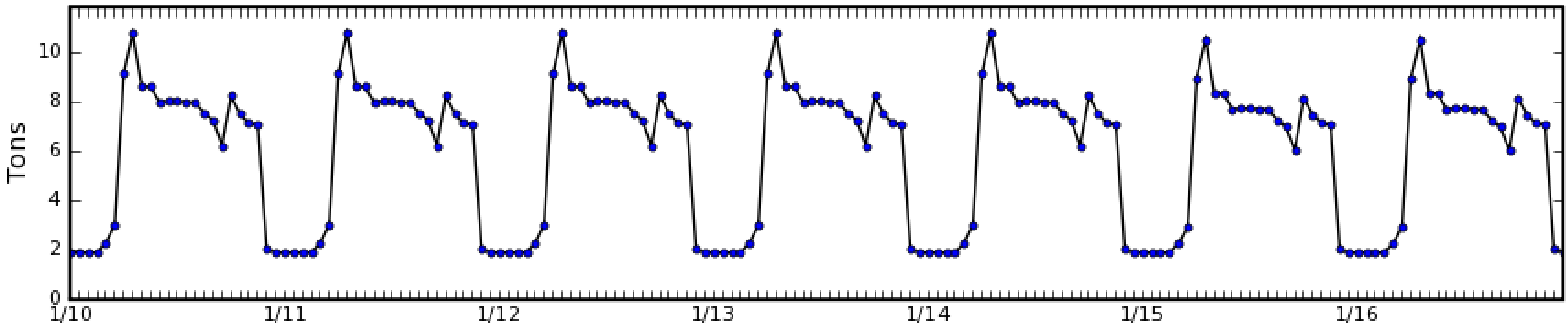


Hourly Emissions, NOx, Stationary Sources, 2005
Tons
0
5
10
15
20
7/10
7/11
7/12
7/13
7/14
7/15
7/16

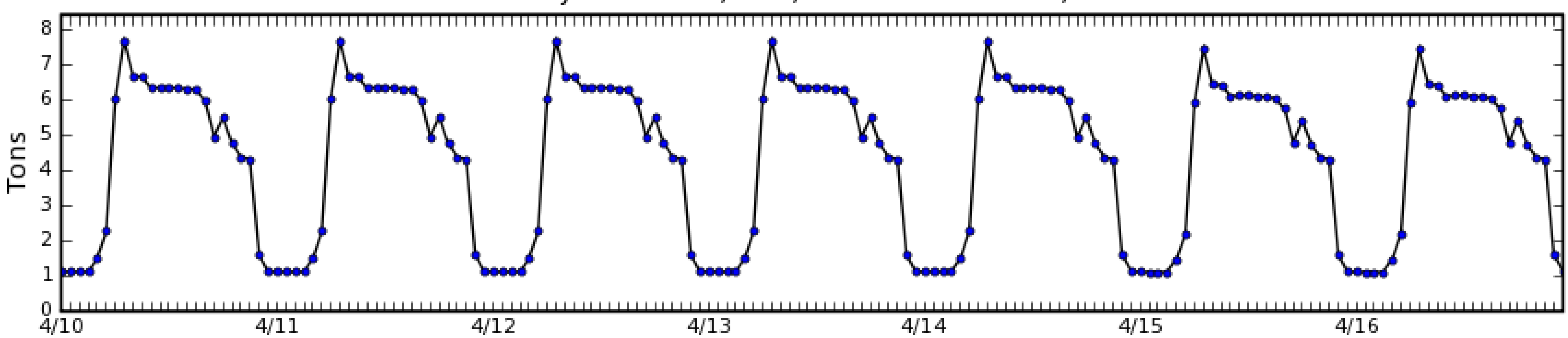



Hourly Emissions, NOx, Stationary Sources, 2005
Tons
0
5
10
15
20
10/16
10/17
10/18
10/19
10/20
10/21
10/22

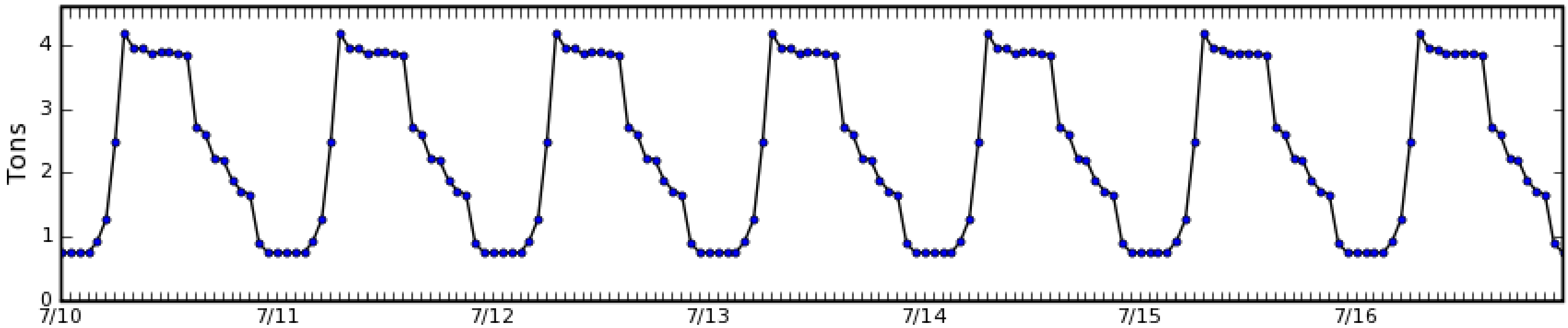
Hourly Emissions, NOx, Area-wide Sources, 2005



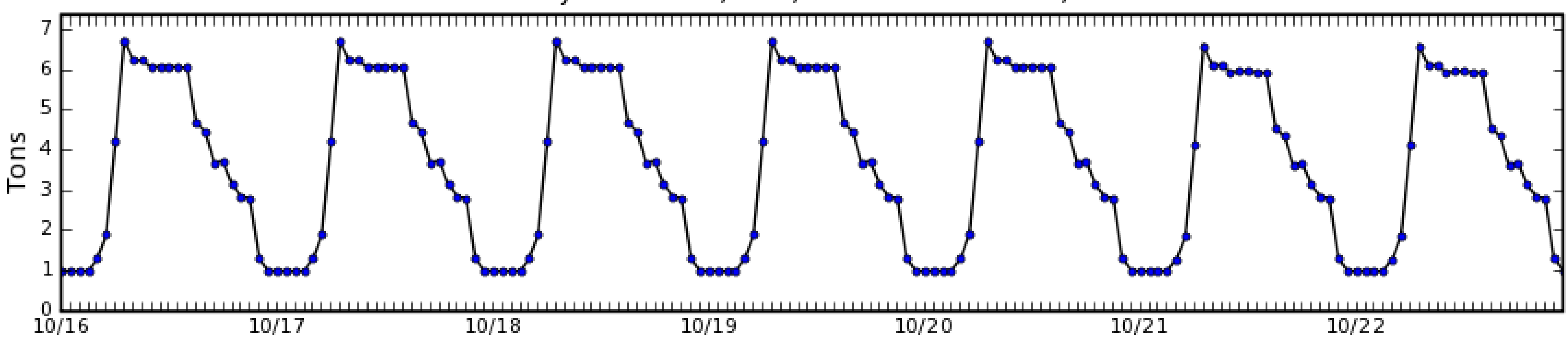

Hourly Emissions, NOx, Area-wide Sources, 2005

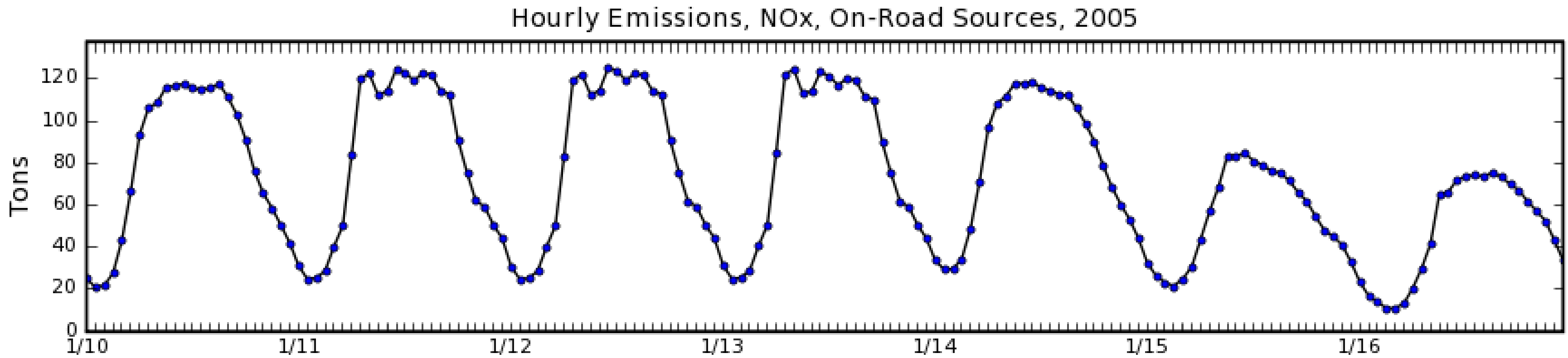


Hourly Emissions, NOx, Area-wide Sources, 2005

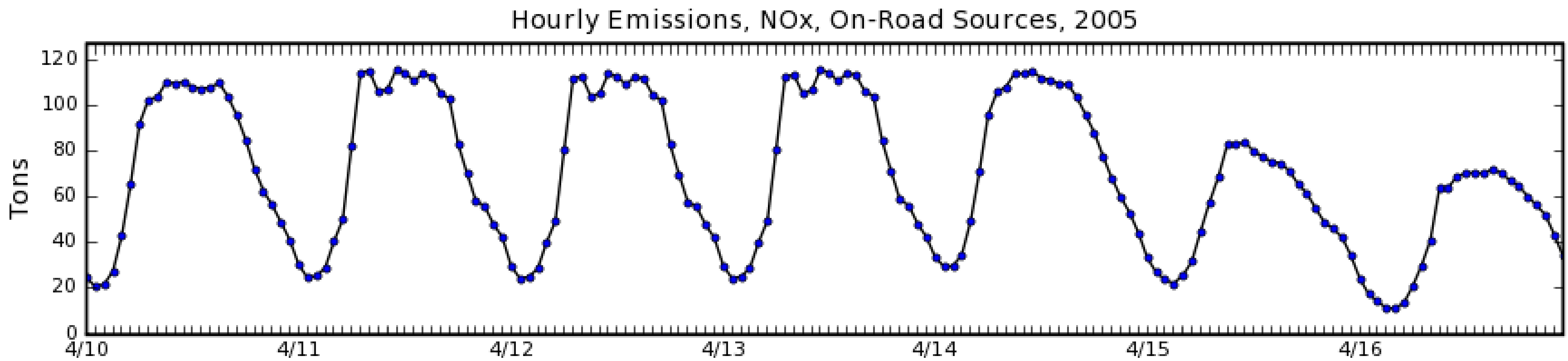



Hourly Emissions, NOx, Area-wide Sources, 2005

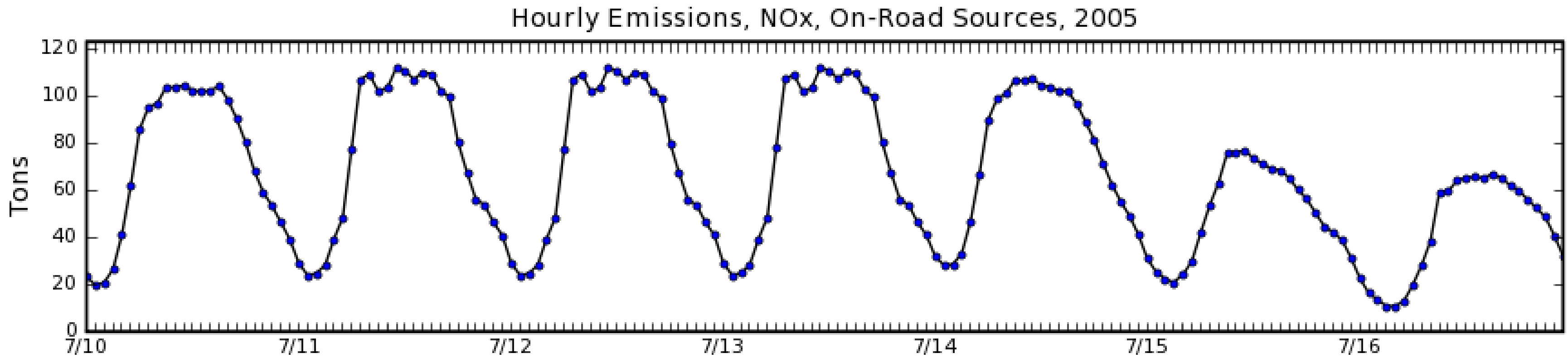




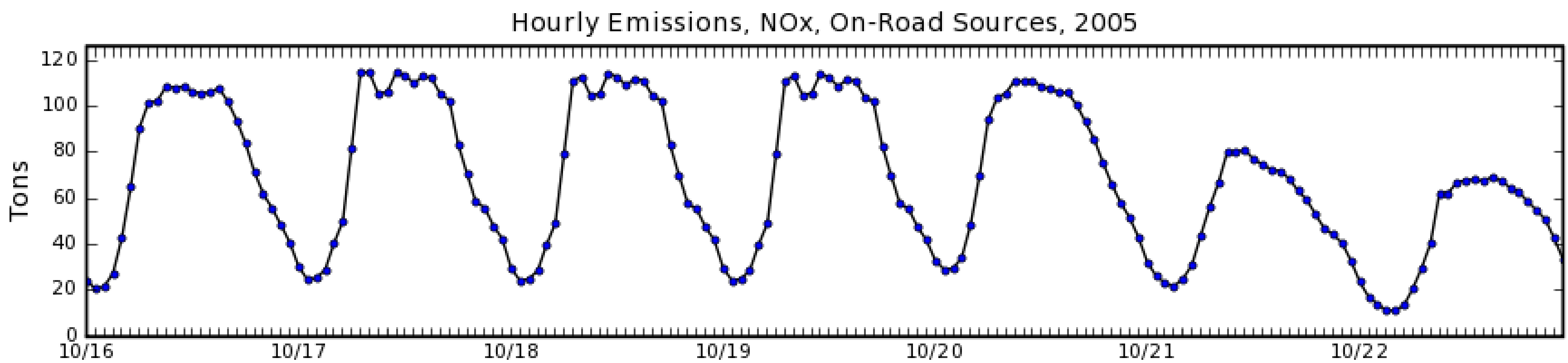
Hourly Emissions, NOx, On-Road Sources, 2005
Tons
0
20
40
60
80
100
120
1/10
1/11
1/12
1/13
1/14
1/15
1/16

Hourly Emissions, NOx, On-Road Sources, 2005
Tons
0
20
40
60
80
100
120
4/10
4/11
4/12
4/13
4/14
4/15
4/16

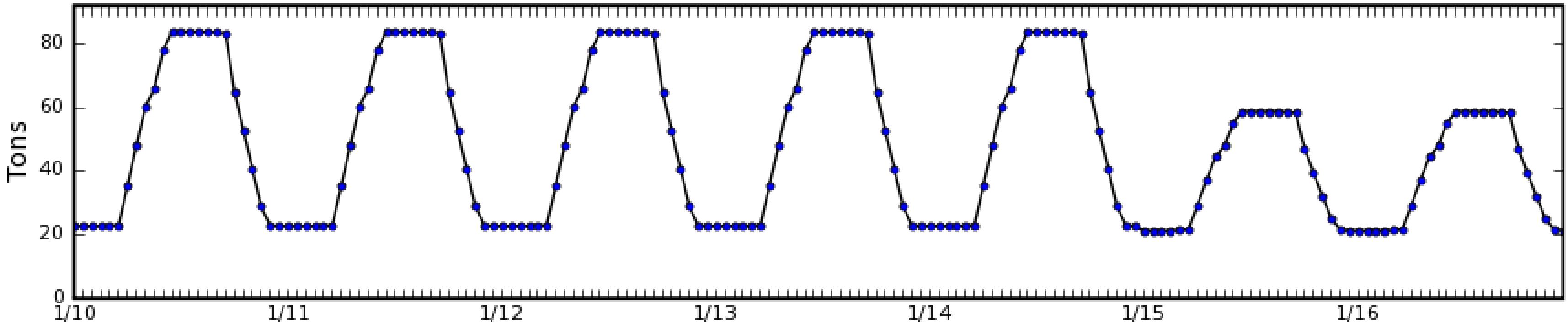


Hourly Emissions, NOx, On-Road Sources, 2005
Tons
0
20
40
60
80
100
120
7/10
7/11
7/12
7/13
7/14
7/15
7/16

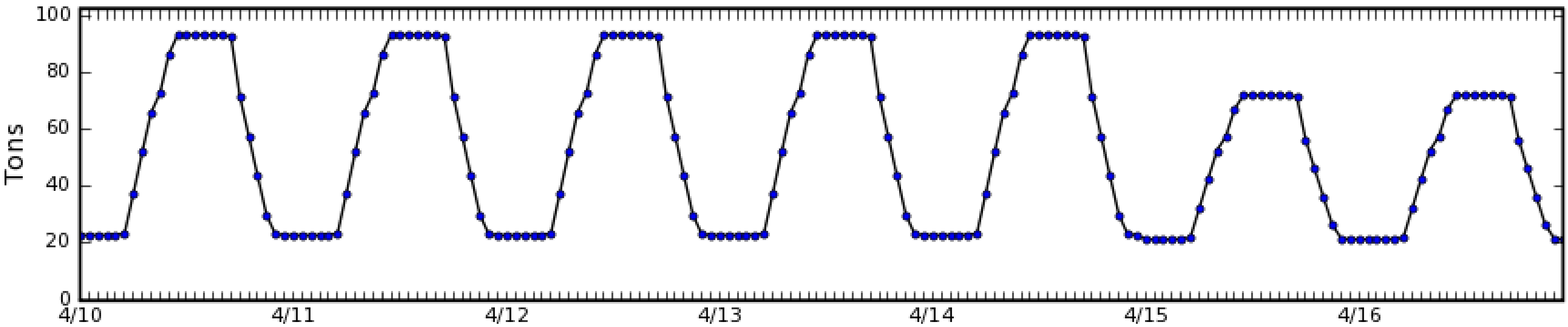



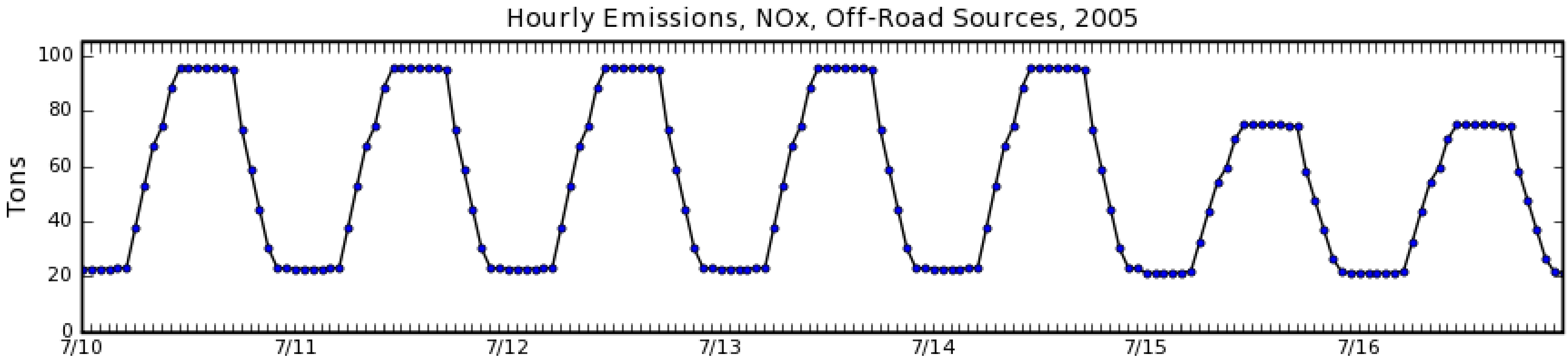
Hourly Emissions, NOx, On-Road Sources, 2005
Tons
0
20
40
60
80
100
120
10/16
10/17
10/18
10/19
10/20
10/21
10/22

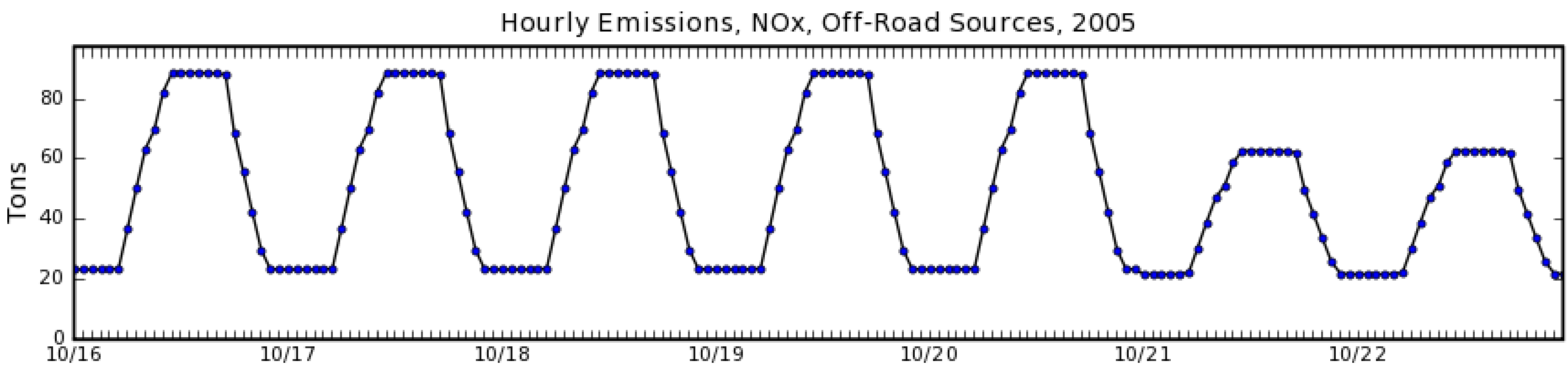
Hourly Emissions, NOx, Off-Road Sources, 2005

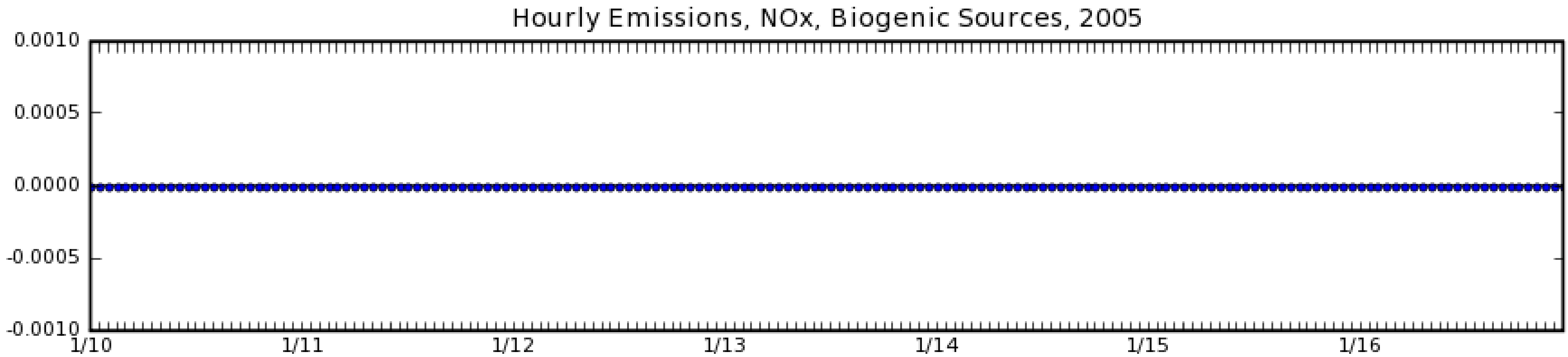



Hourly Emissions, NOx, Off-Road Sources, 2005

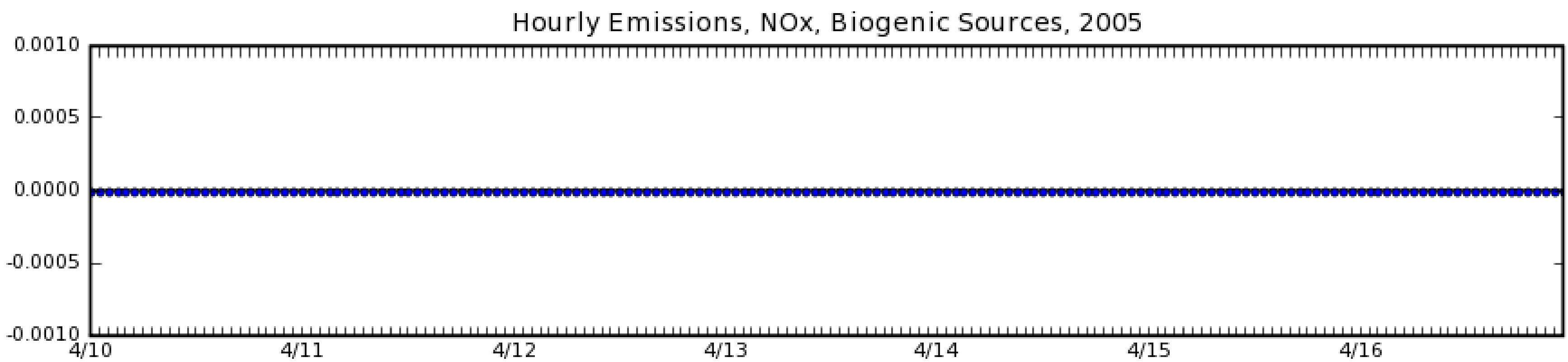



Hourly Emissions, NOx, Off-Road Sources, 2005
Tons
0
20
40
60
80
100
7/10
7/11
7/12
7/13
7/14
7/15
7/16

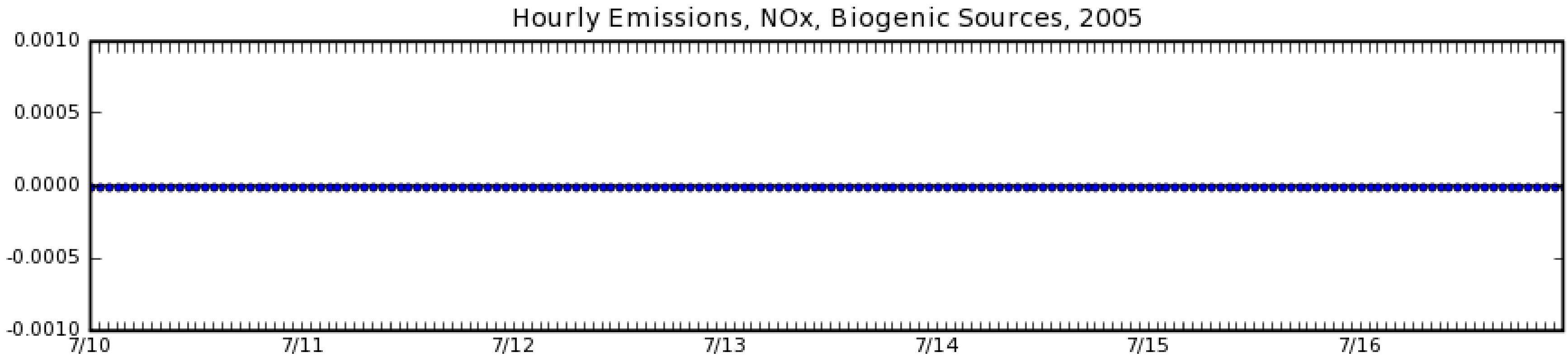

Hourly Emissions, NOx, Off-Road Sources, 2005
Tons
0
20
40
60
80
10/16
10/17
10/18
10/19
10/20
10/21
10/22



Hourly Emissions, NOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16

Hourly Emissions, NOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

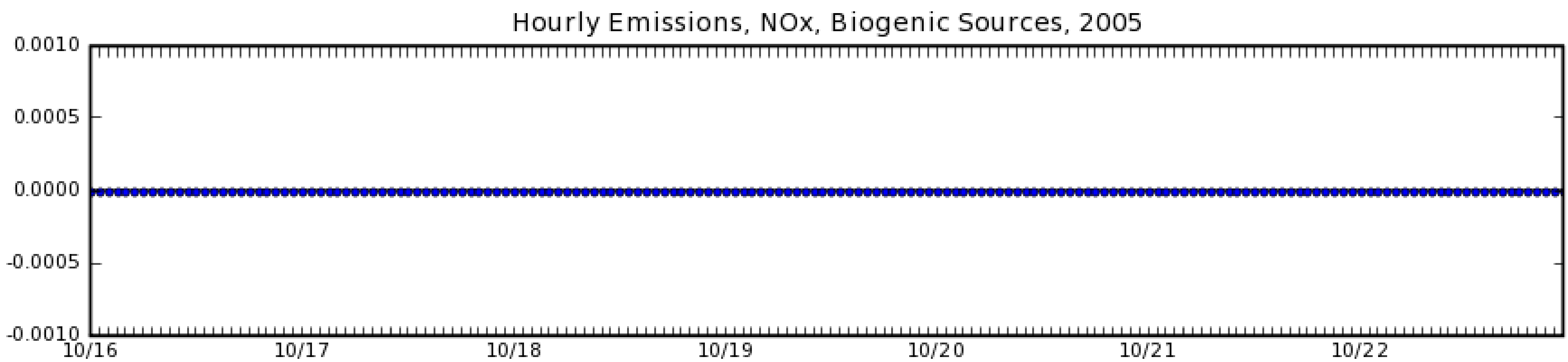
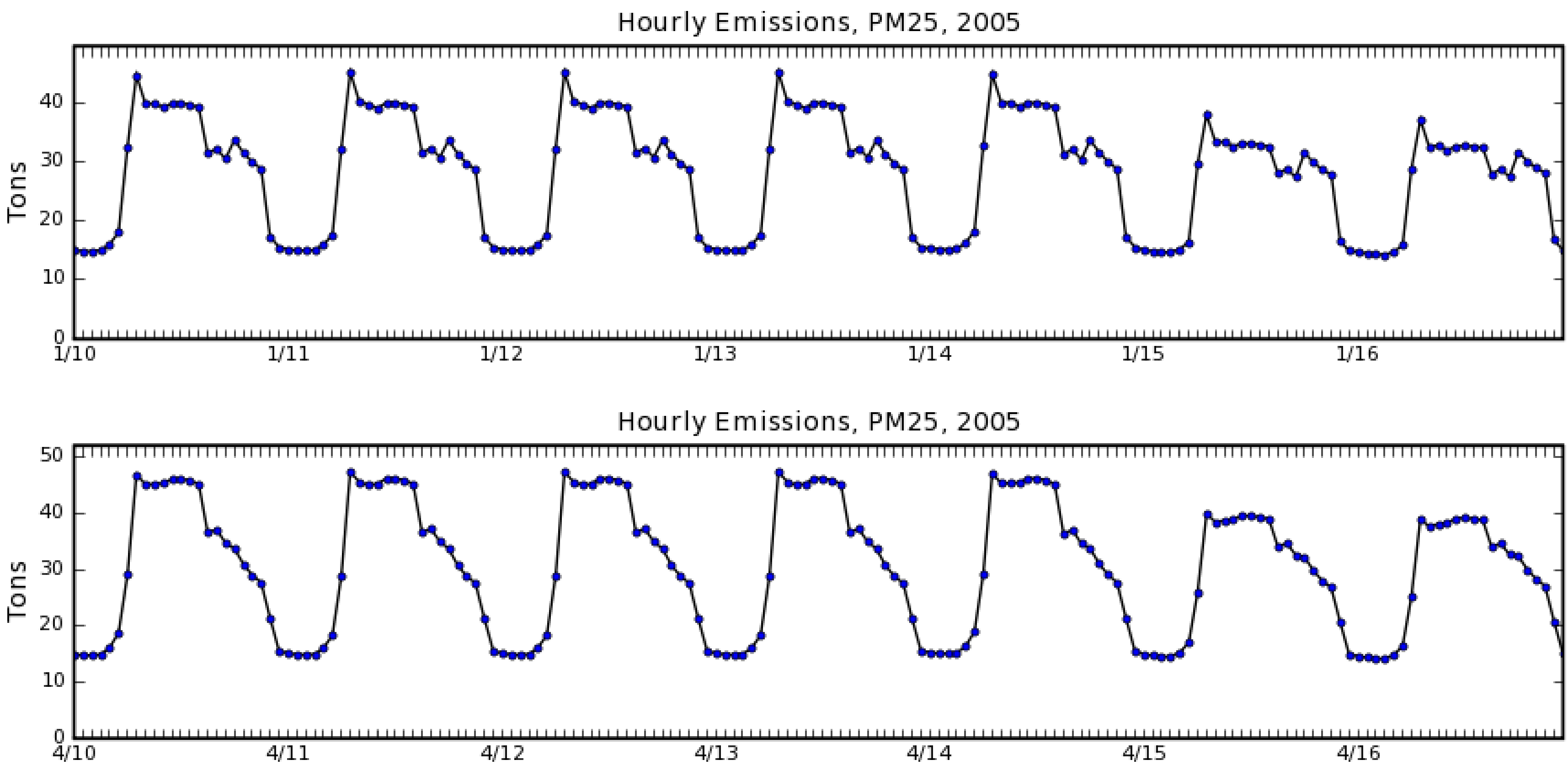
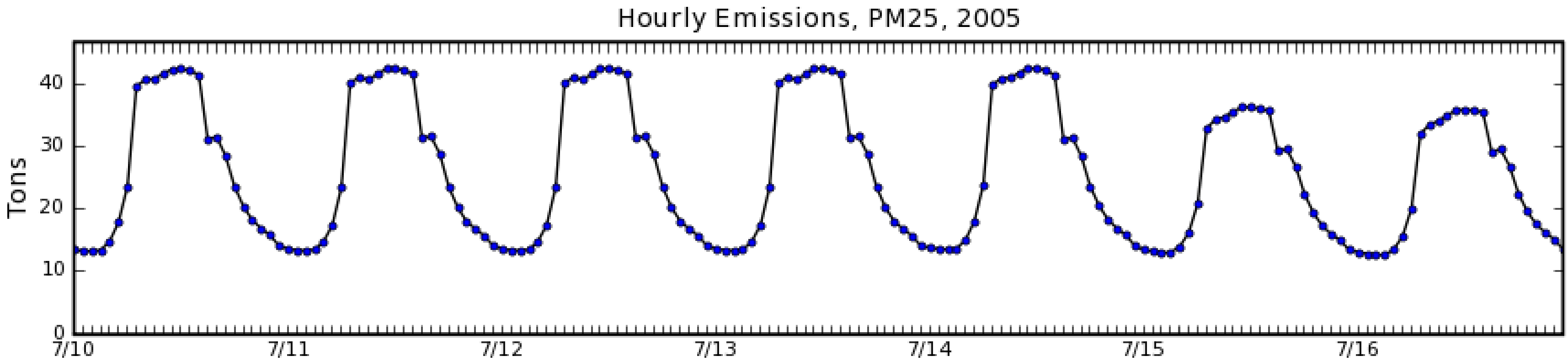
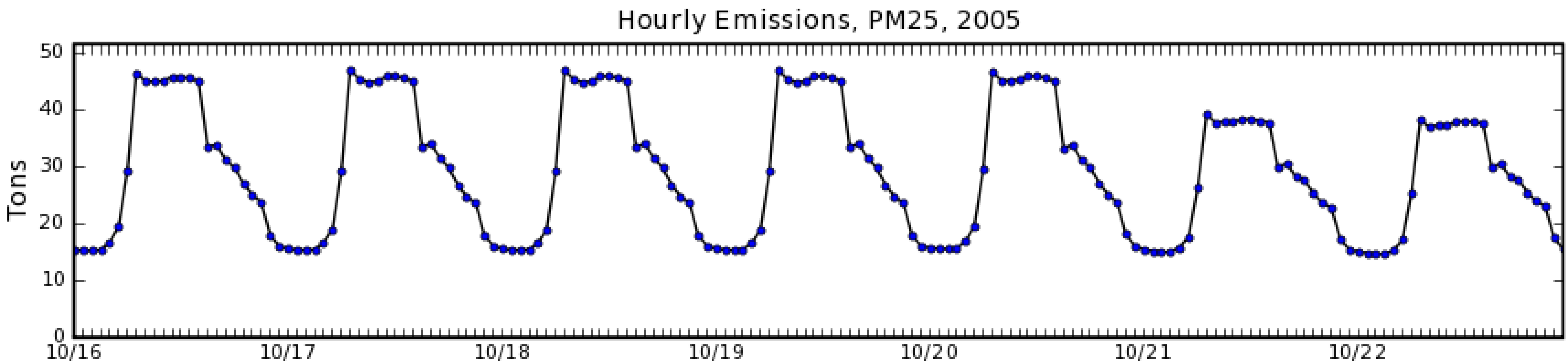
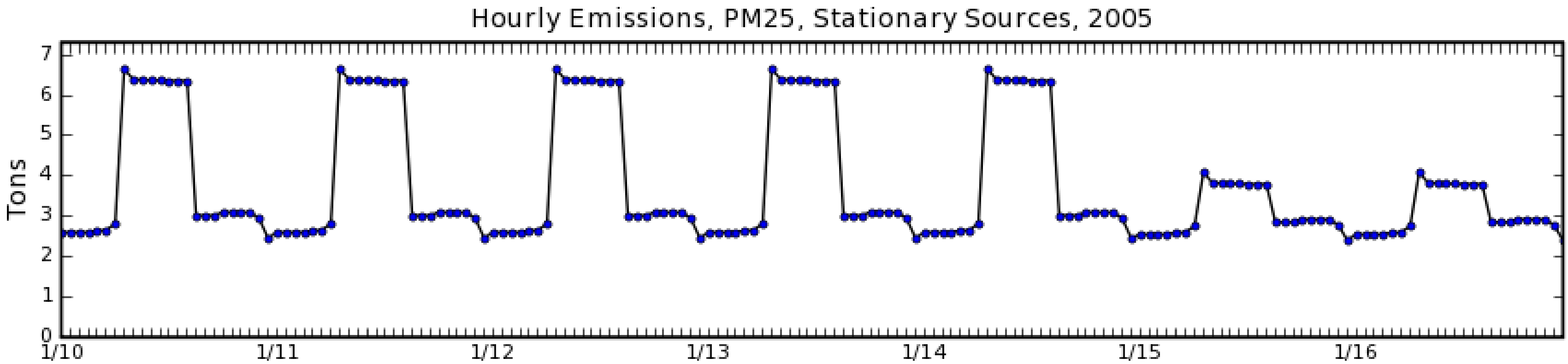

Hourly Emissions, NOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

**Figure 3.66. Daily Emissions of PM2.5 in 2005**

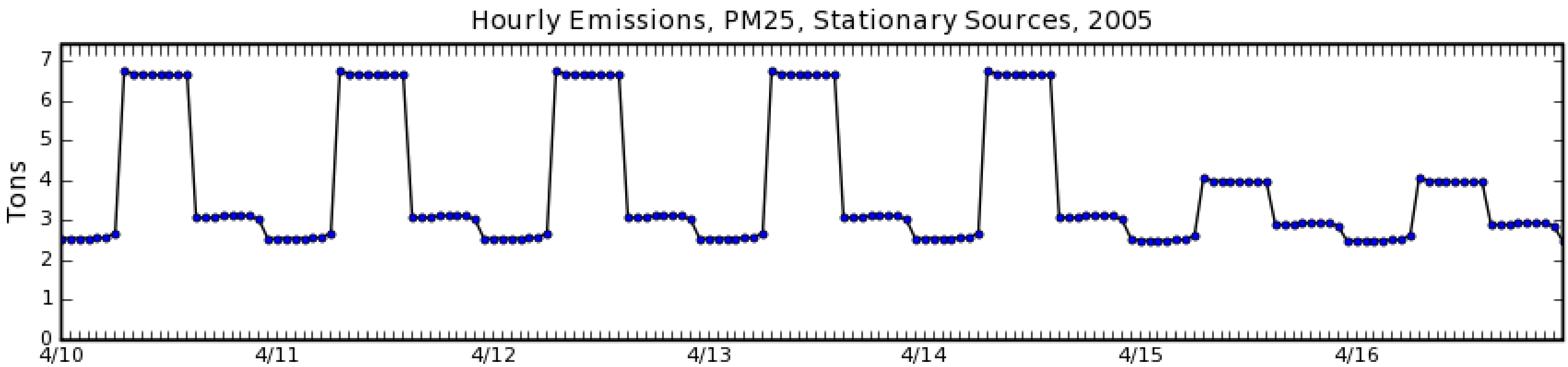



Hourly Emissions, PM25, 2005
Tons
0
10
20
30
40
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, PM25, 2005
Tons
0
10
20
30
40
50
10/16
10/17
10/18
10/19
10/20
10/21
10/22

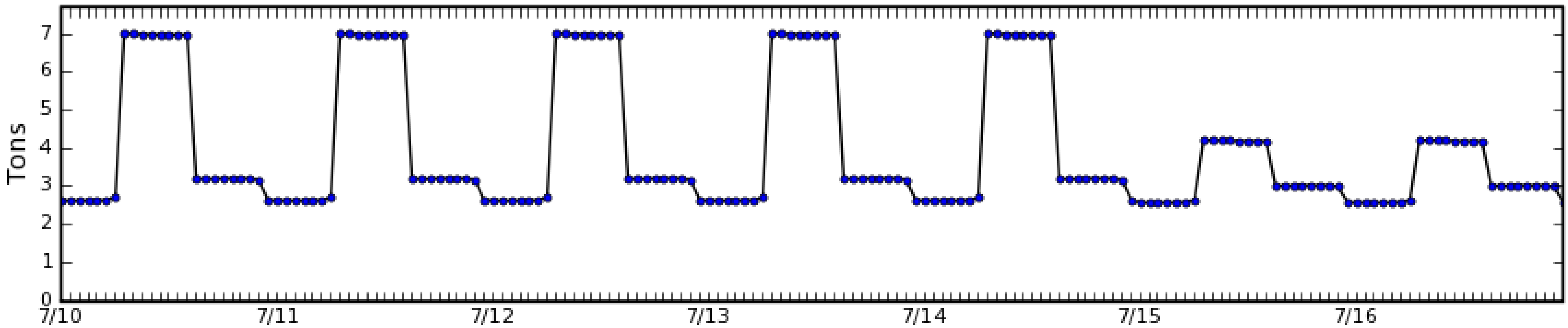


Hourly Emissions, PM25, Stationary Sources, 2005
Tons
0
1
2
3
4
5
6
7
1/10
1/11
1/12
1/13
1/14
1/15
1/16

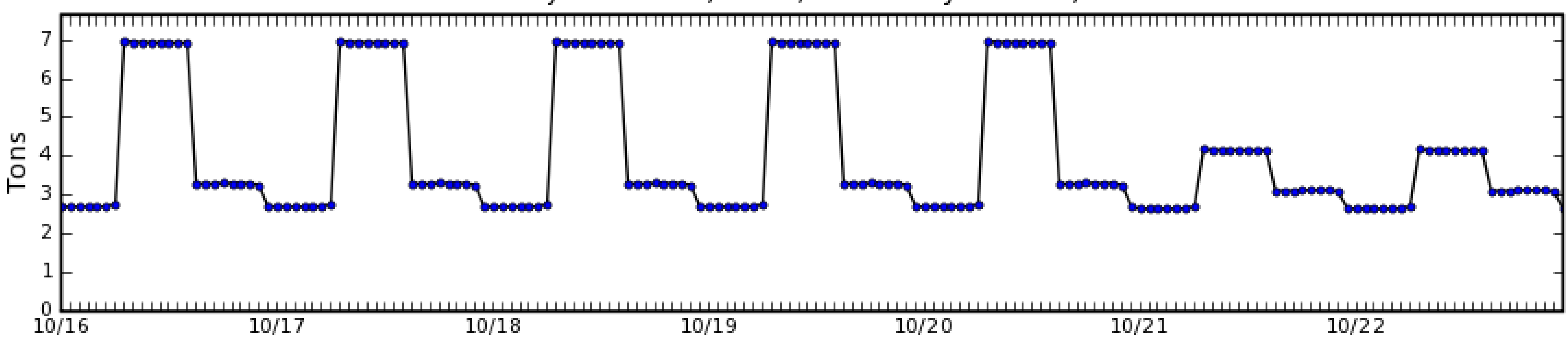



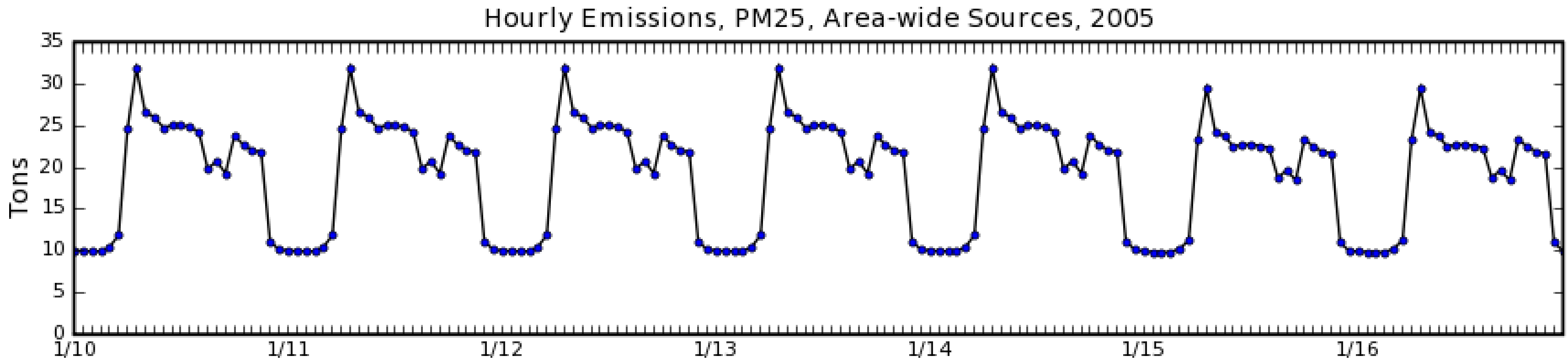
Hourly Emissions, PM25, Stationary Sources, 2005
Tons
0
1
2
3
4
5
6
7
4/10
4/11
4/12
4/13
4/14
4/15
4/16

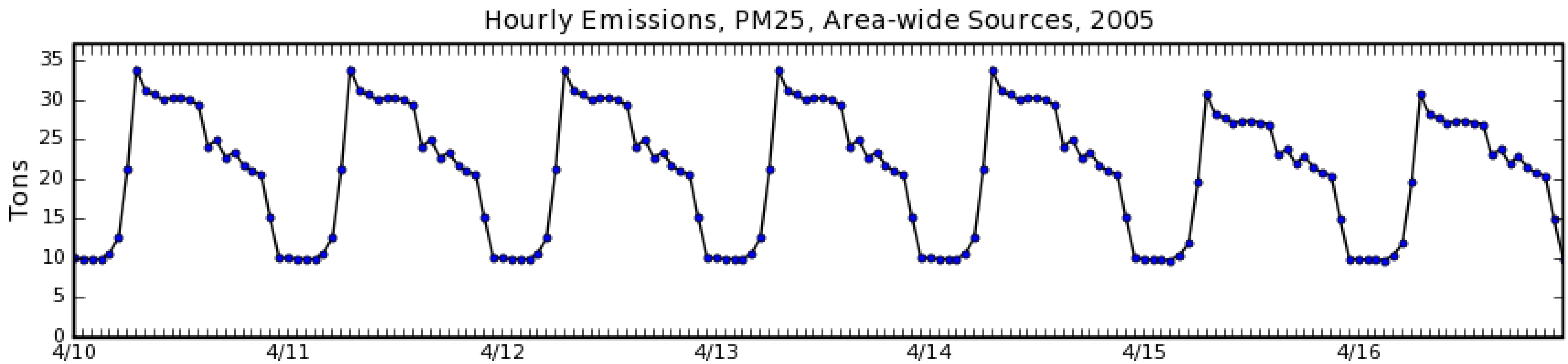
Hourly Emissions, PM25, Stationary Sources, 2005

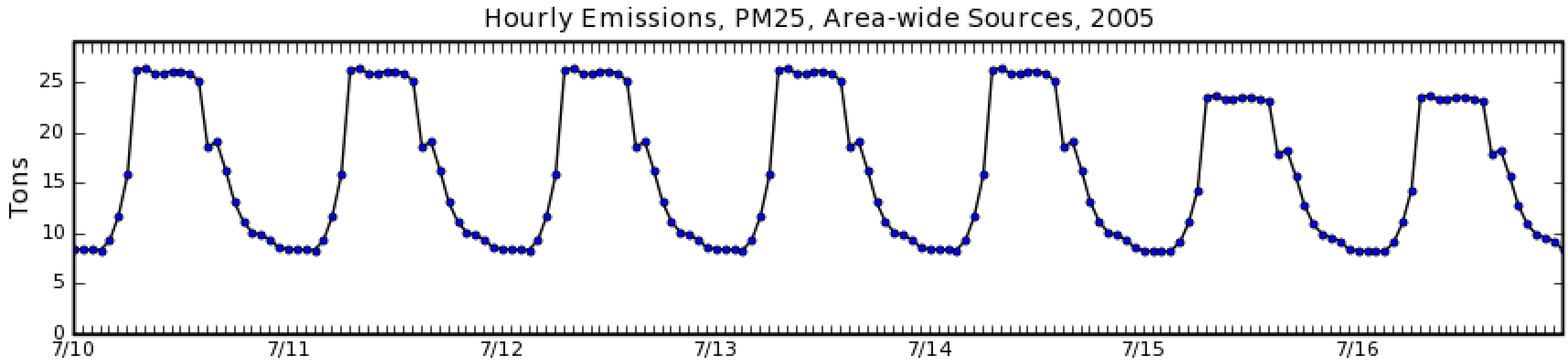


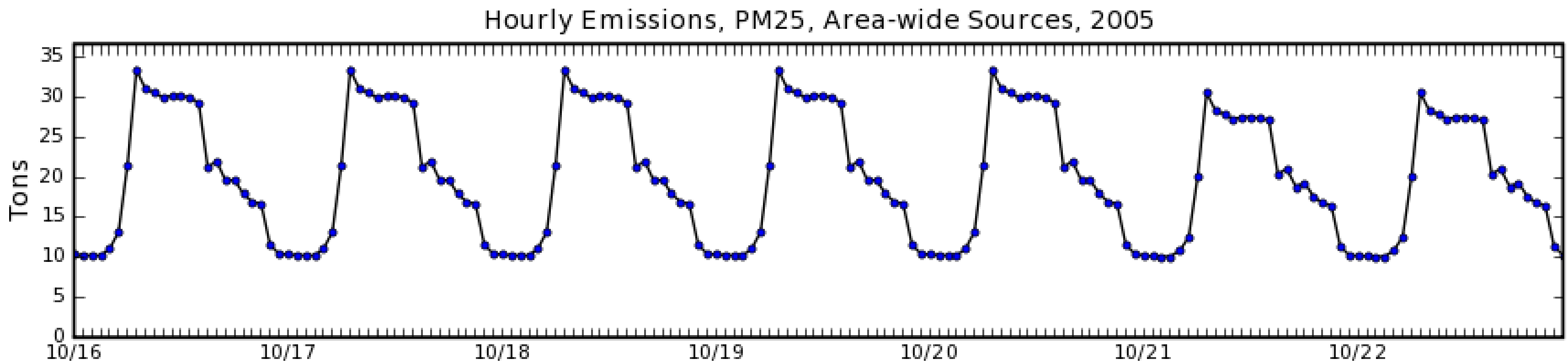

Hourly Emissions, PM25, Stationary Sources, 2005

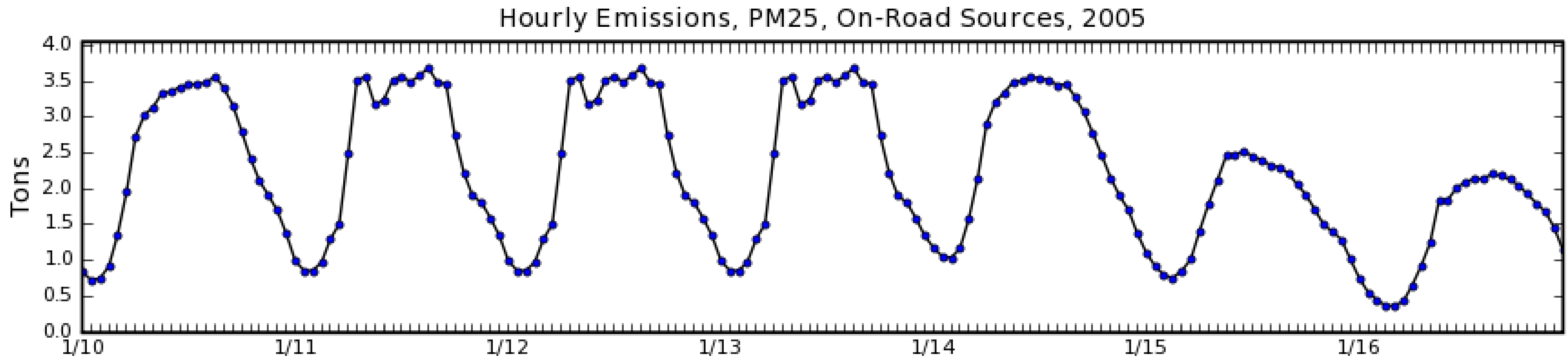


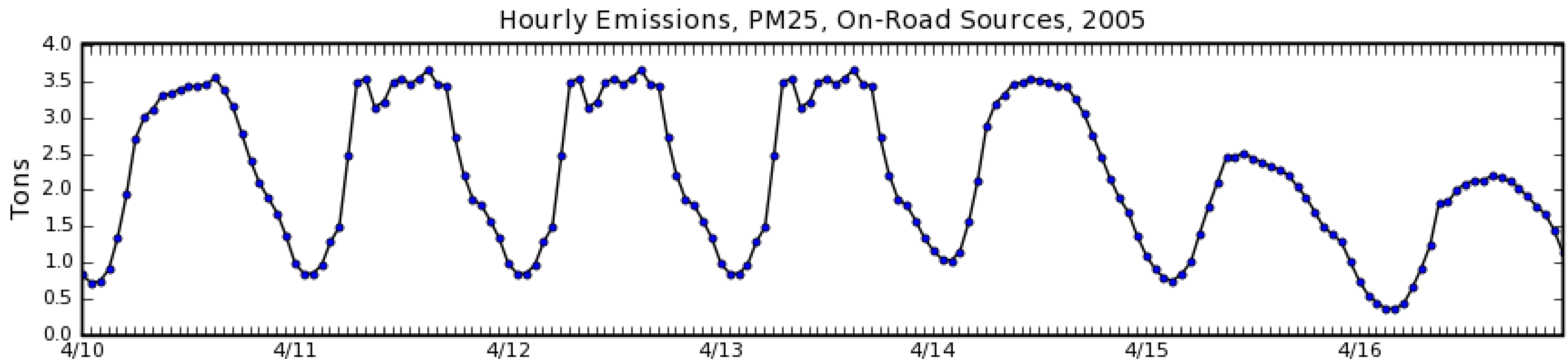

Hourly Emissions, PM25, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
30
35
1/10
1/11
1/12
1/13
1/14
1/15
1/16

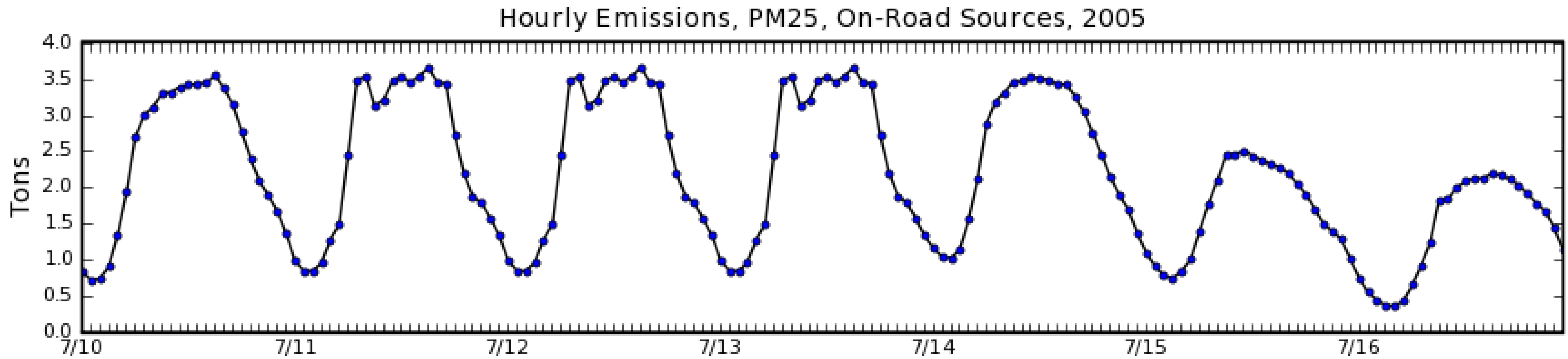

Hourly Emissions, PM25, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
30
35
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
7/10
7/11
7/12
7/13
7/14
7/15
7/16

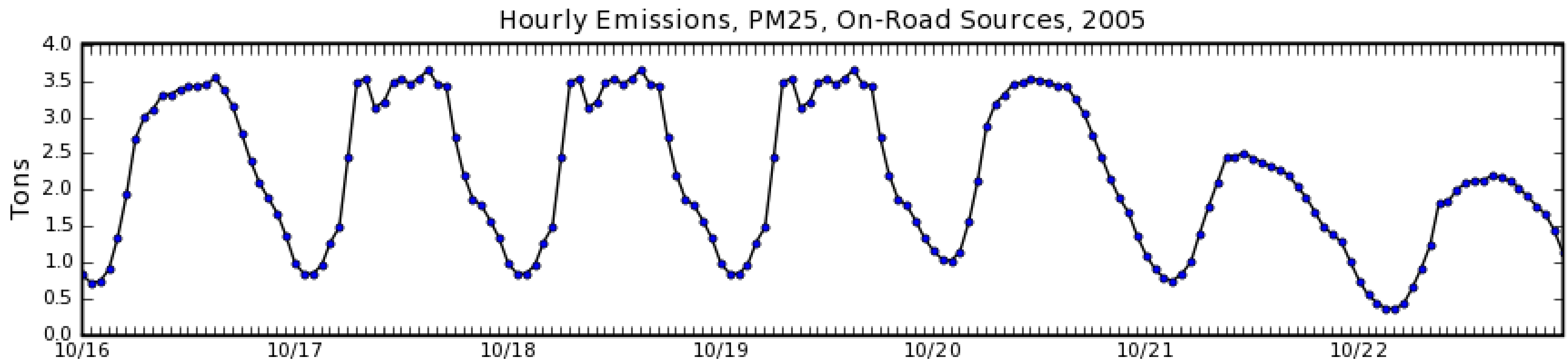

Hourly Emissions, PM25, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
30
35
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, PM25, On-Road Sources, 2005
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, PM25, On-Road Sources, 2005
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

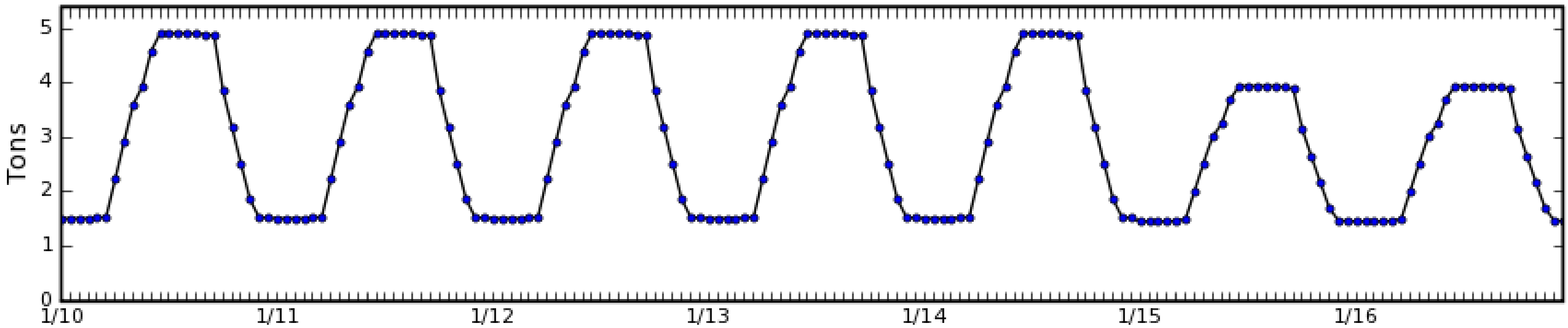


Hourly Emissions, PM25, On-Road Sources, 2005
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

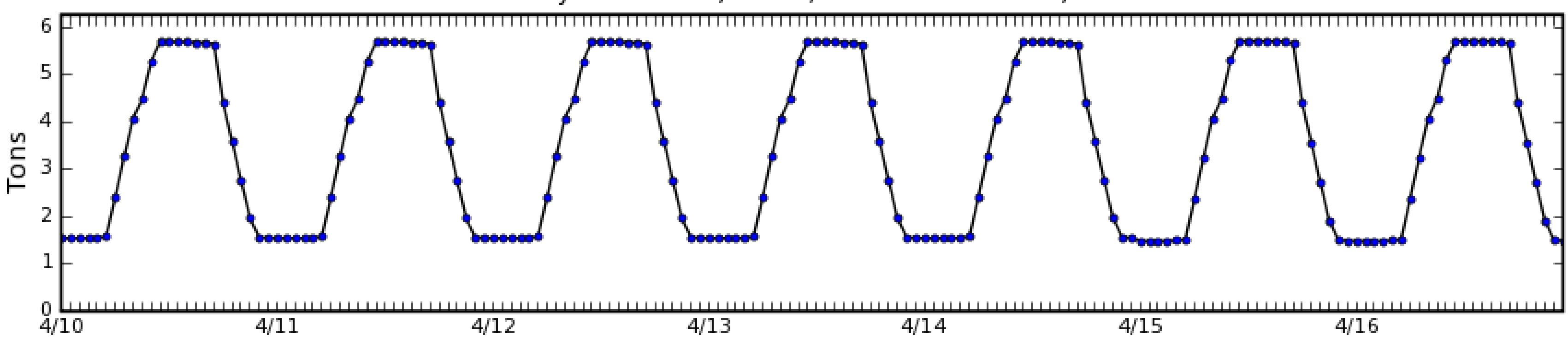



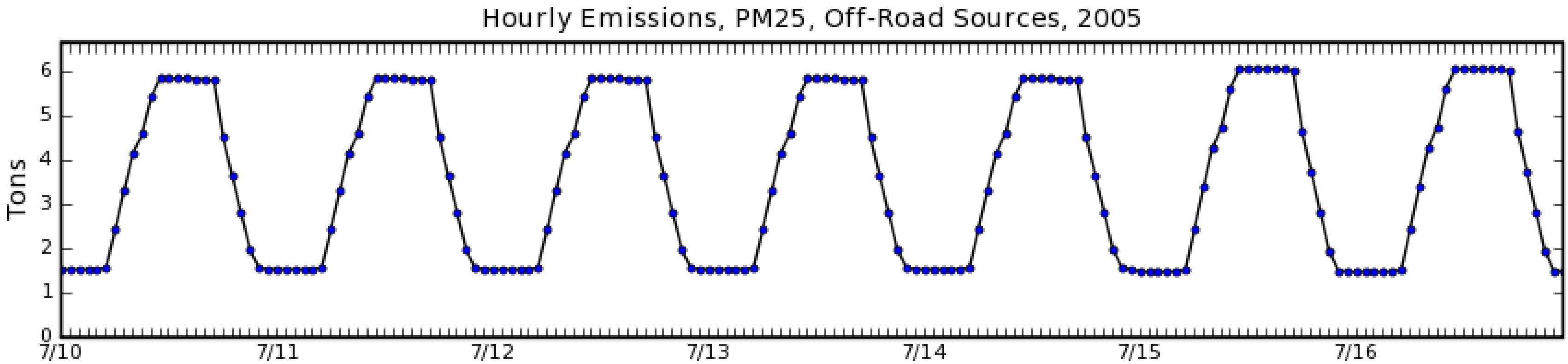
Hourly Emissions, PM25, On-Road Sources, 2005
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

Hourly Emissions, PM25, Off-Road Sources, 2005

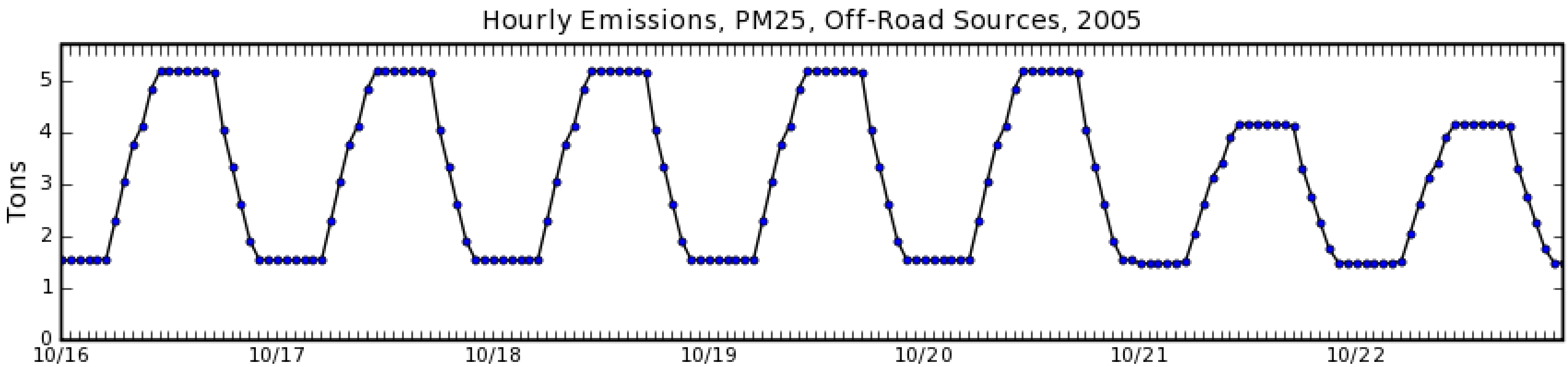



Hourly Emissions, PM25, Off-Road Sources, 2005

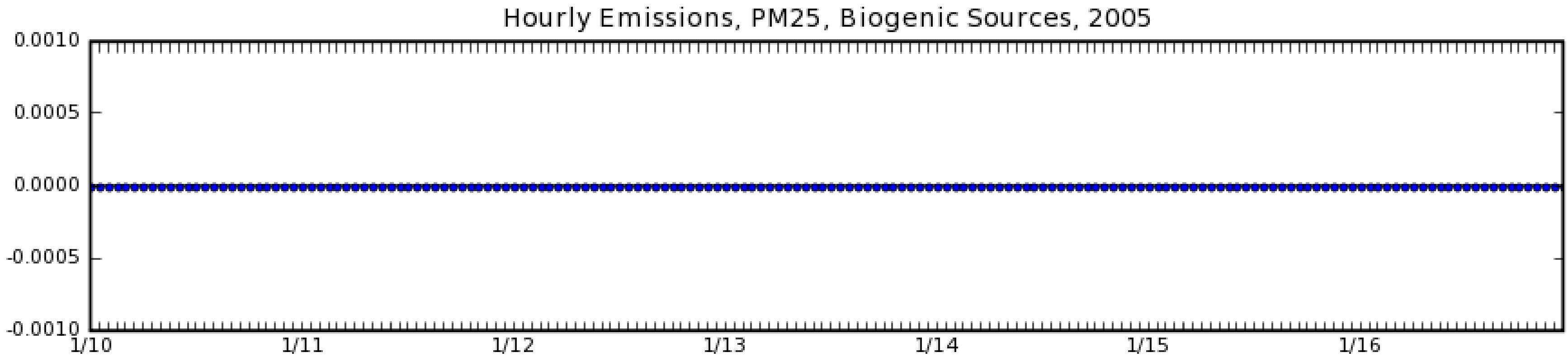




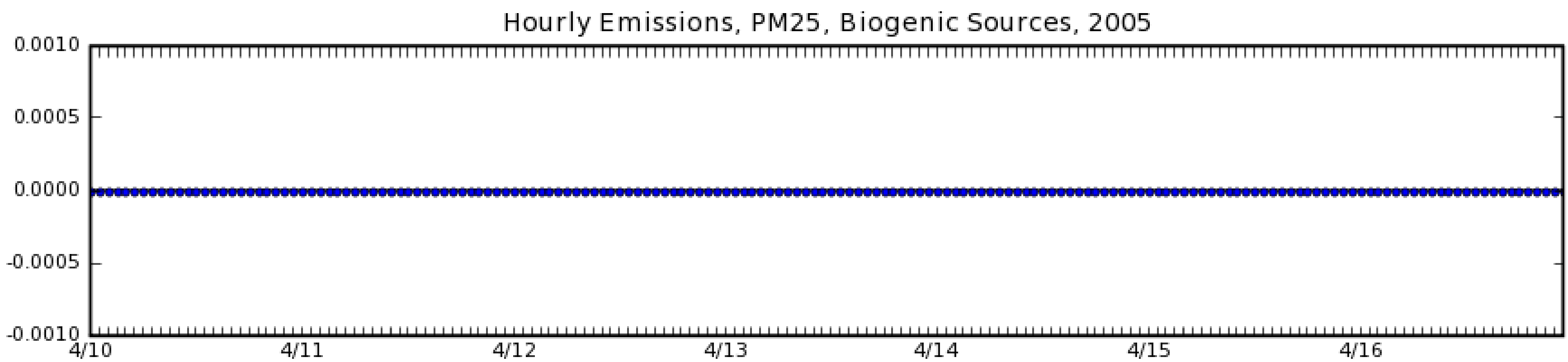
Hourly Emissions, PM25, Off-Road Sources, 2005
Tons
0
1
2
3
4
5
6
7/10
7/11
7/12
7/13
7/14
7/15
7/16

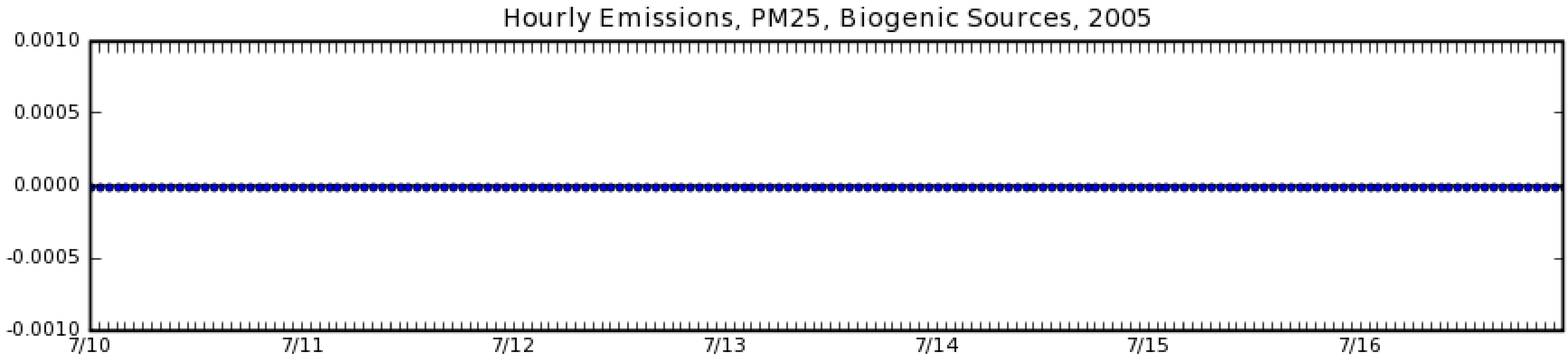
Hourly Emissions, PM25, Off-Road Sources, 2005
Tons
0
1
2
3
4
5
10/16
10/17
10/18
10/19
10/20
10/21
10/22



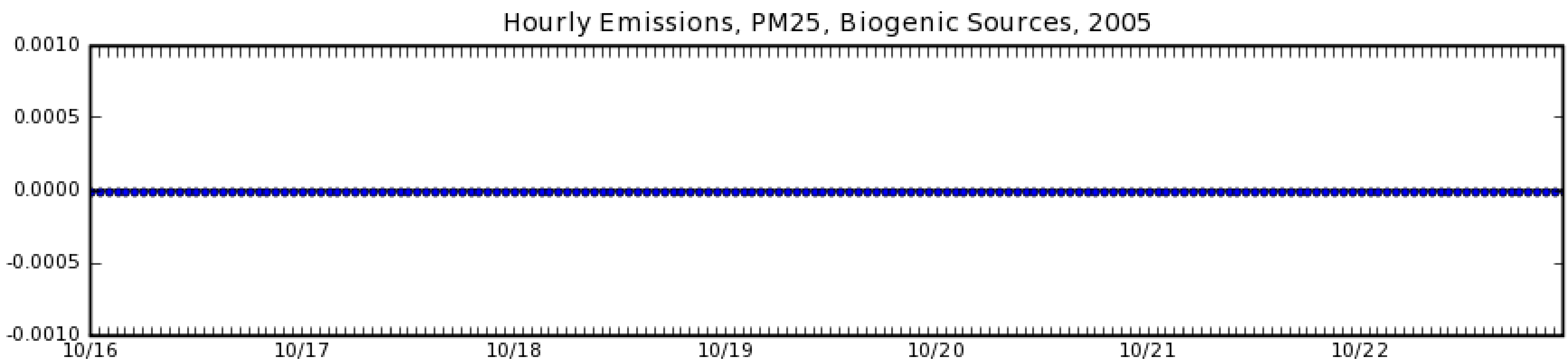
Hourly Emissions, PM25, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16

Hourly Emissions, PM25, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16

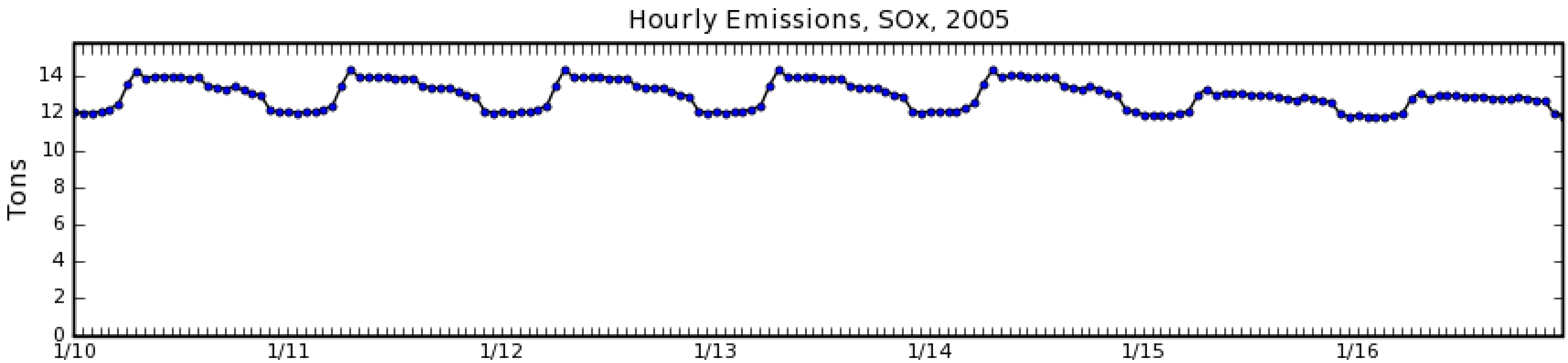


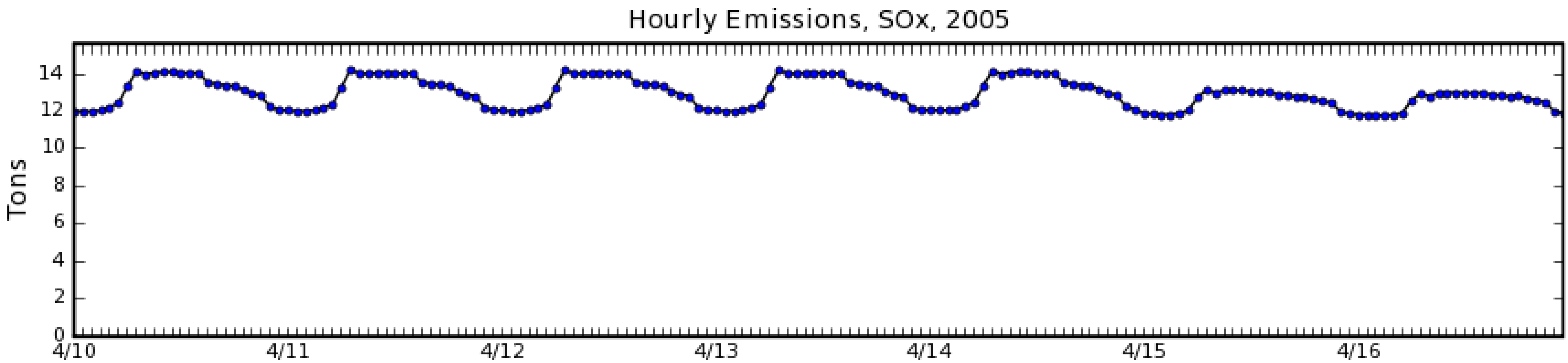
Hourly Emissions, PM25, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

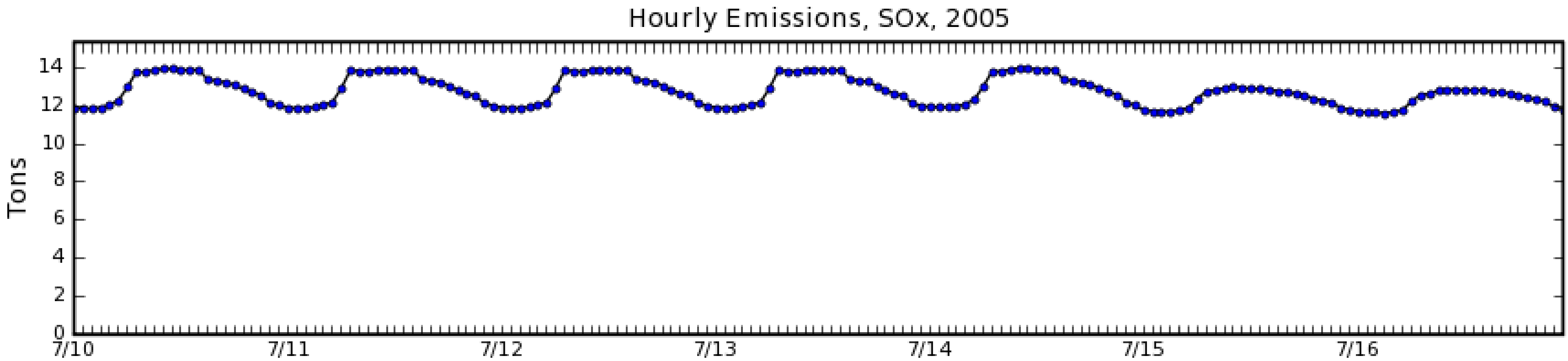



Hourly Emissions, PM25, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

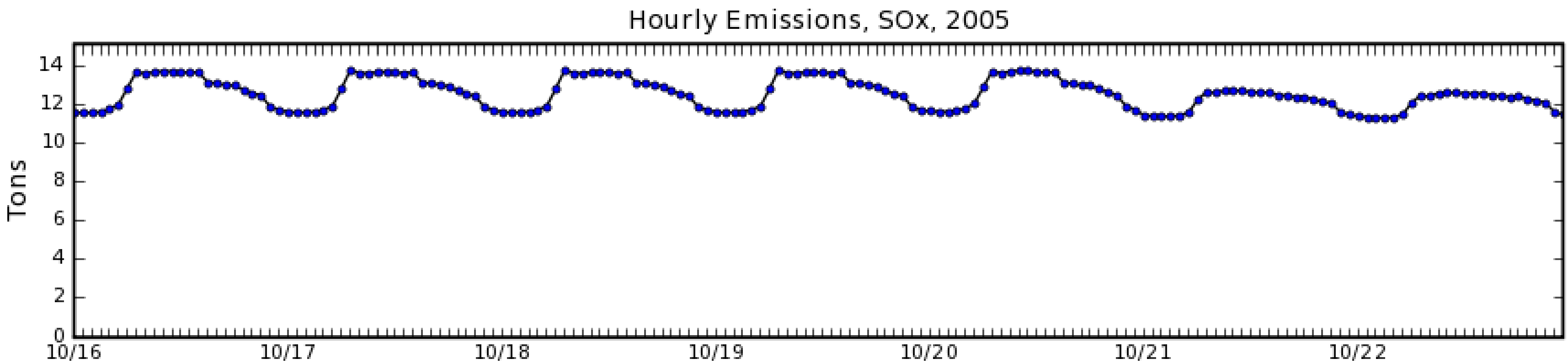
**Figure 3.67. Daily Emissions of SOx in 2005**



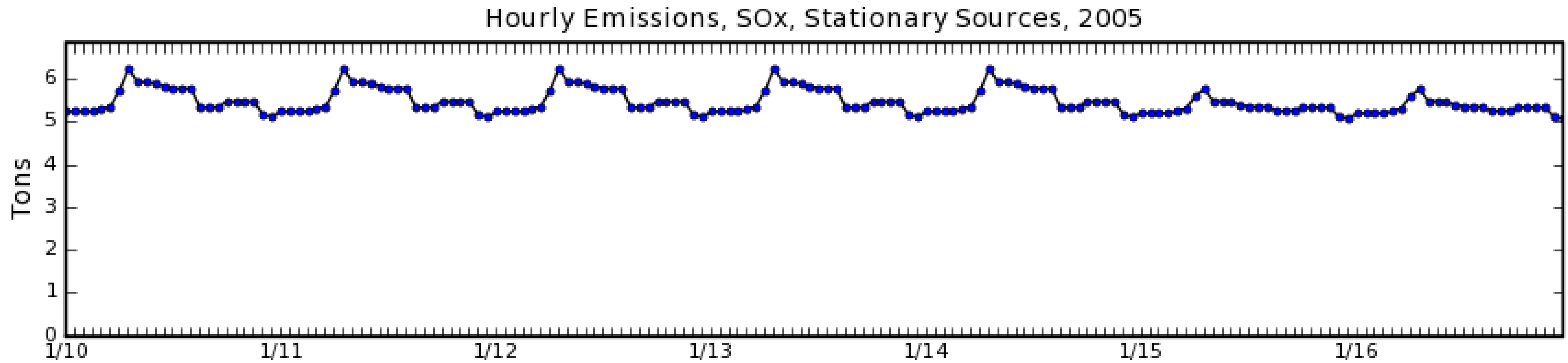



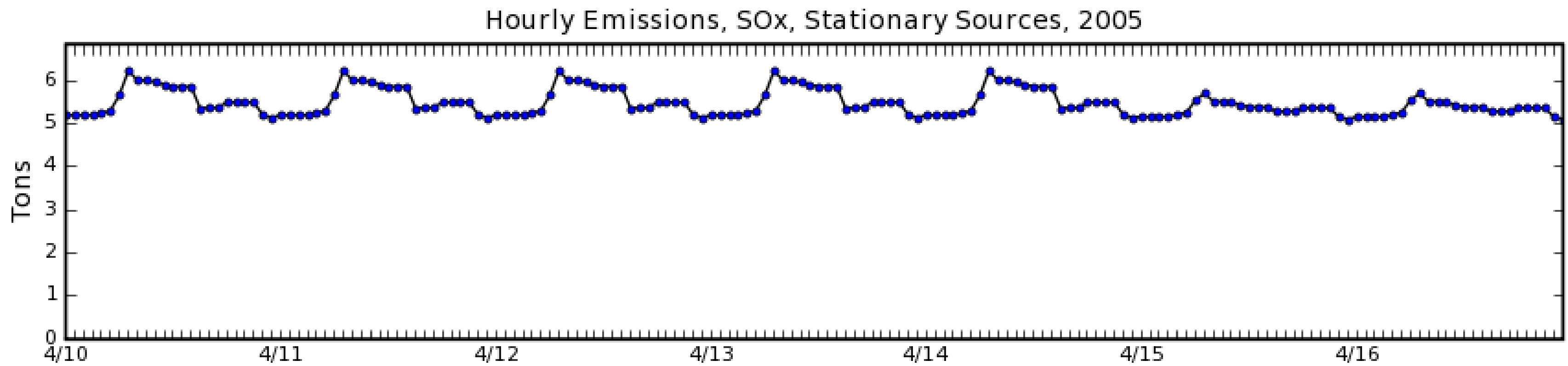


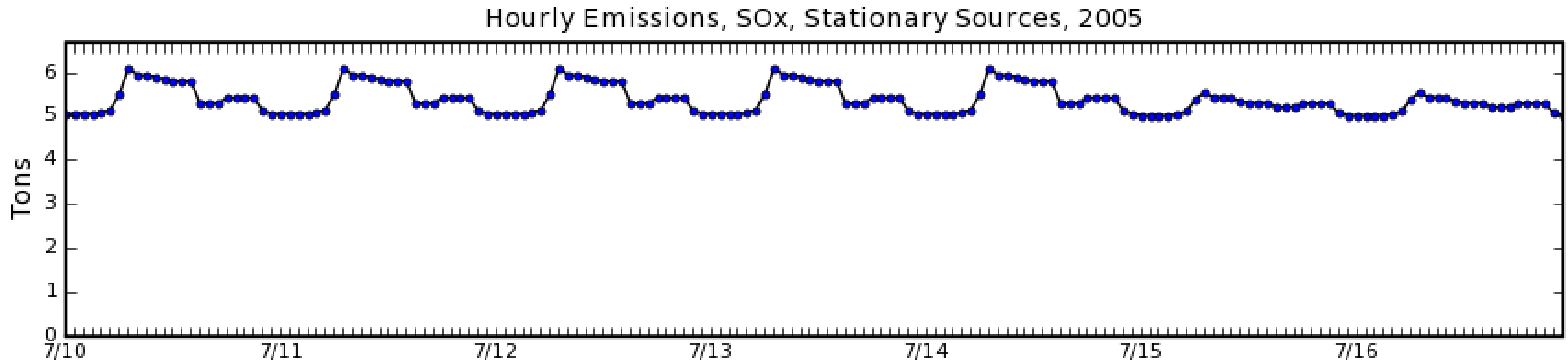
Hourly Emissions, SOx, 2005
Tons
0
2
4
6
8
10
12
14
7/10
7/11
7/12
7/13
7/14
7/15
7/16

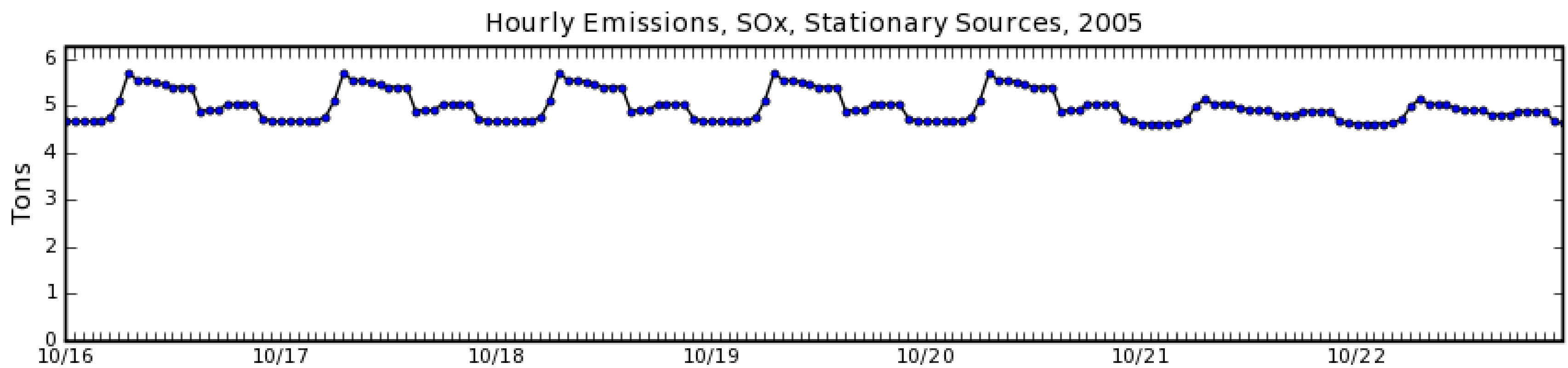



Hourly Emissions, SOx, 2005
Tons
0
2
4
6
8
10
12
14
10/16
10/17
10/18
10/19
10/20
10/21
10/22

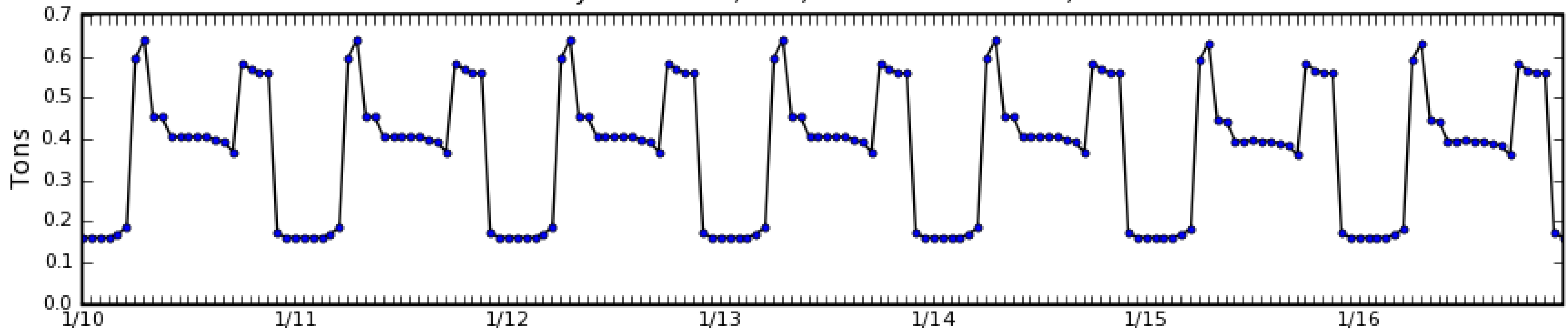

Hourly Emissions, SOx, Stationary Sources, 2005
Tons
0
1
2
3
4
5
6
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, SOx, Stationary Sources, 2005
Tons
0
1
2
3
4
5
6
4/10
4/11
4/12
4/13
4/14
4/15
4/16

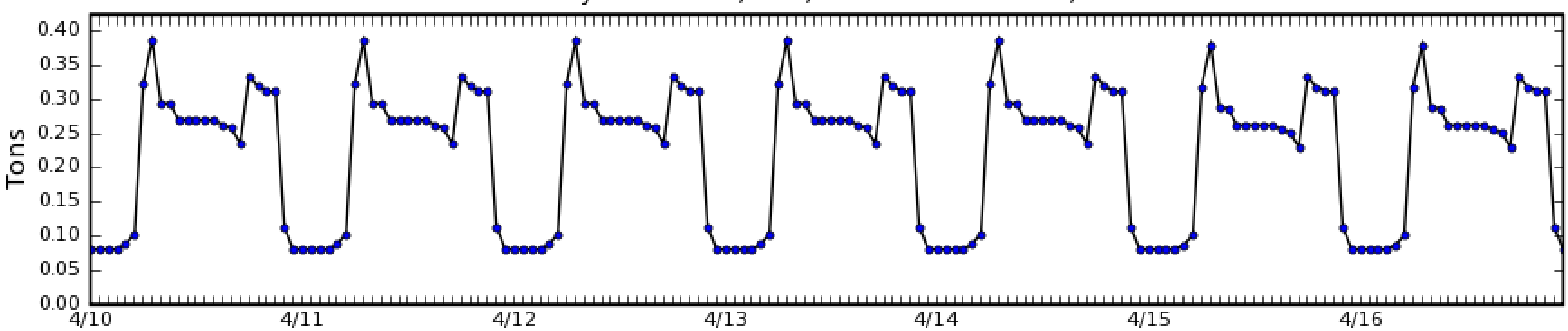

Hourly Emissions, SOx, Stationary Sources, 2005
Tons
0
1
2
3
4
5
6
7/10
7/11
7/12
7/13
7/14
7/15
7/16

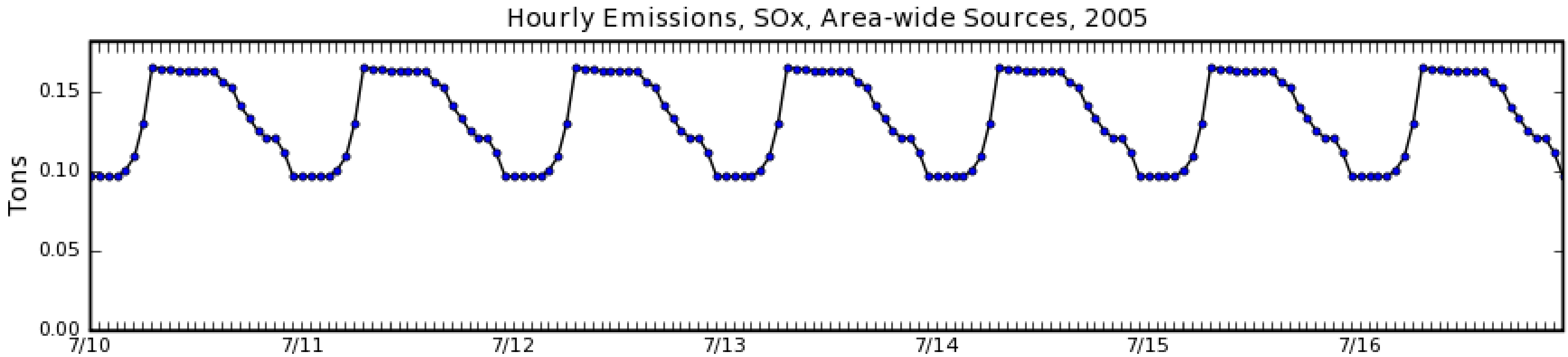

Hourly Emissions, SOx, Stationary Sources, 2005
Tons
0
1
2
3
4
5
6
10/16
10/17
10/18
10/19
10/20
10/21
10/22

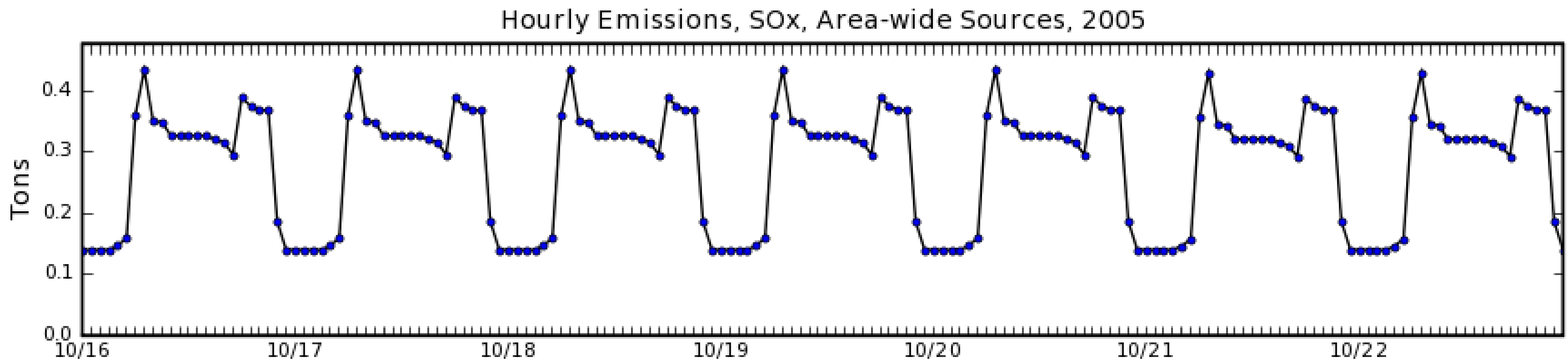
Hourly Emissions, SOx, Area-wide Sources, 2005

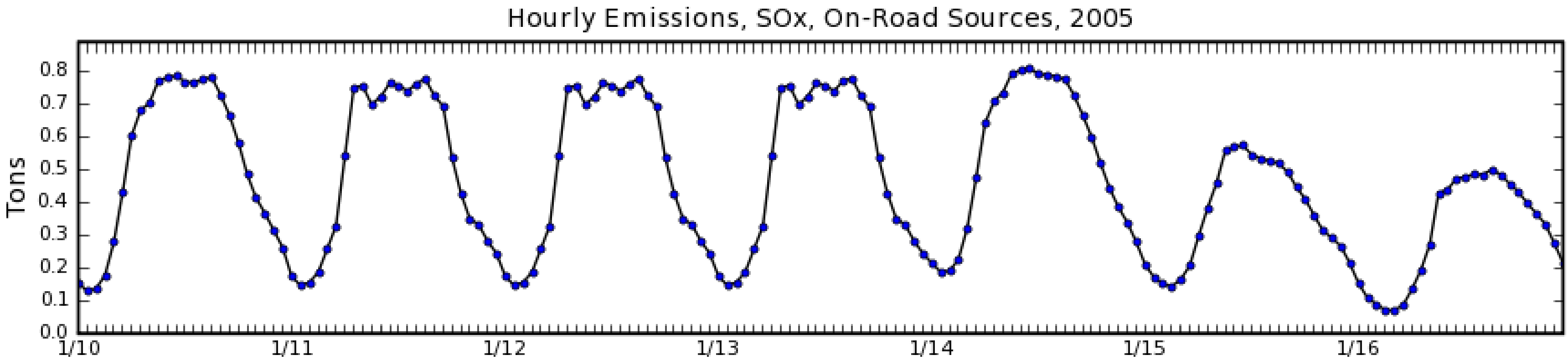



Hourly Emissions, SOx, Area-wide Sources, 2005

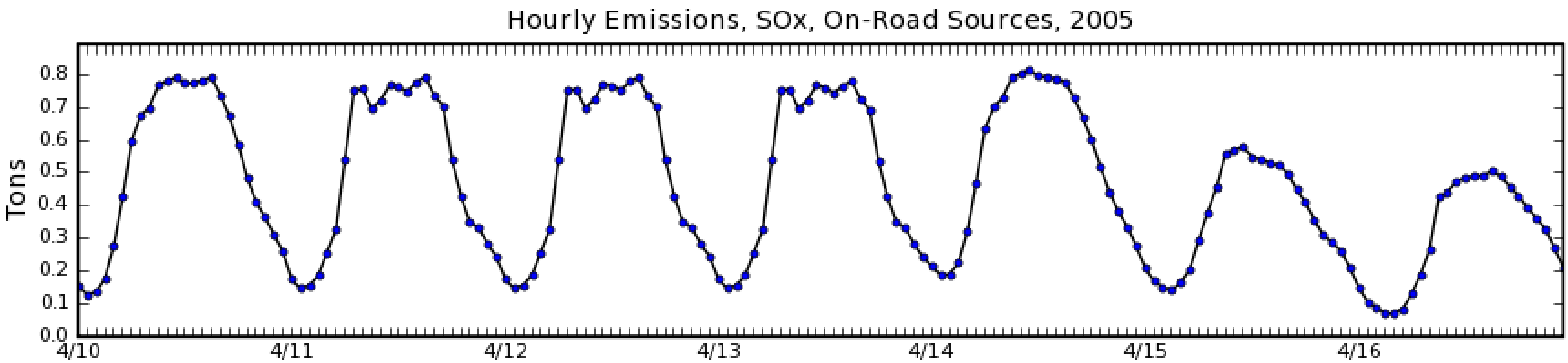



Hourly Emissions, SOx, Area-wide Sources, 2005
Tons
0.15
0.10
0.05
0.00
7/10
7/11
7/12
7/13
7/14
7/15
7/16

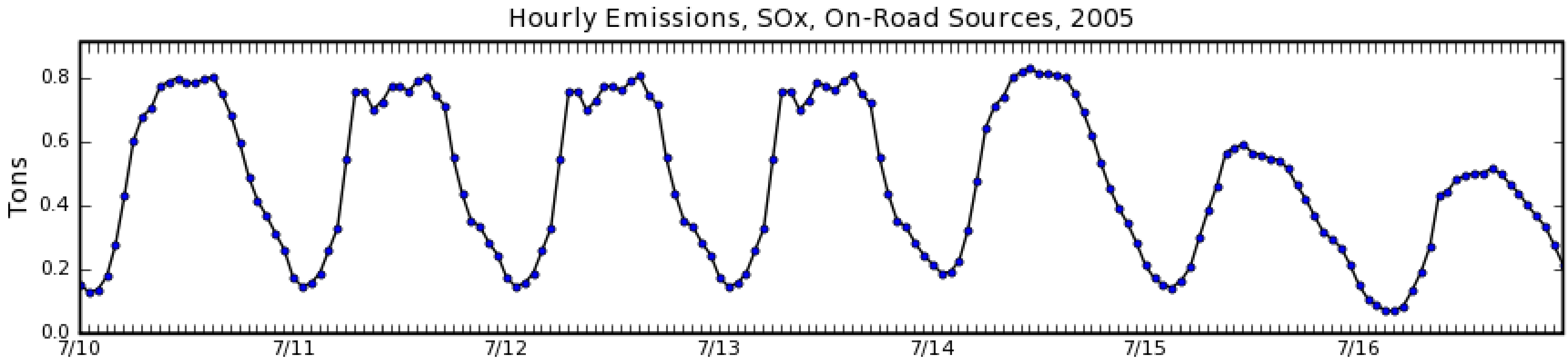

Hourly Emissions, SOx, Area-wide Sources, 2005
Tons
0.4
0.3
0.2
0.1
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22



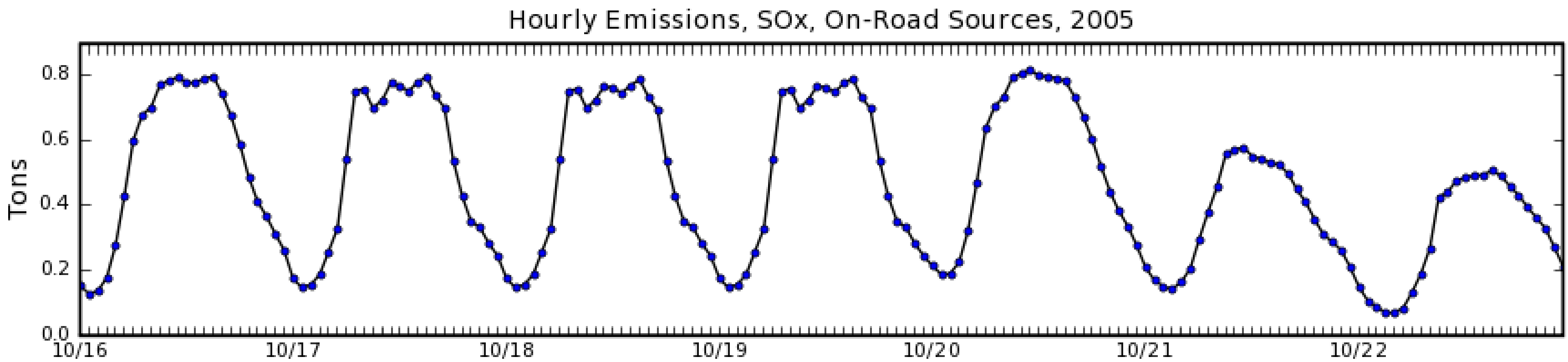
Hourly Emissions, SOx, On-Road Sources, 2005
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1/10
1/11
1/12
1/13
1/14
1/15
1/16

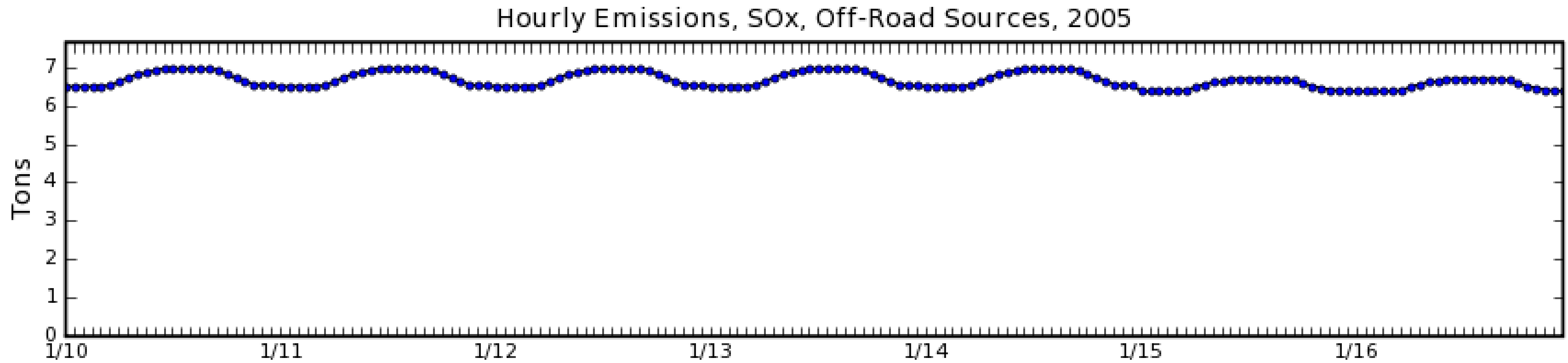
Hourly Emissions, SOx, On-Road Sources, 2005
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
4/10
4/11
4/12
4/13
4/14
4/15
4/16

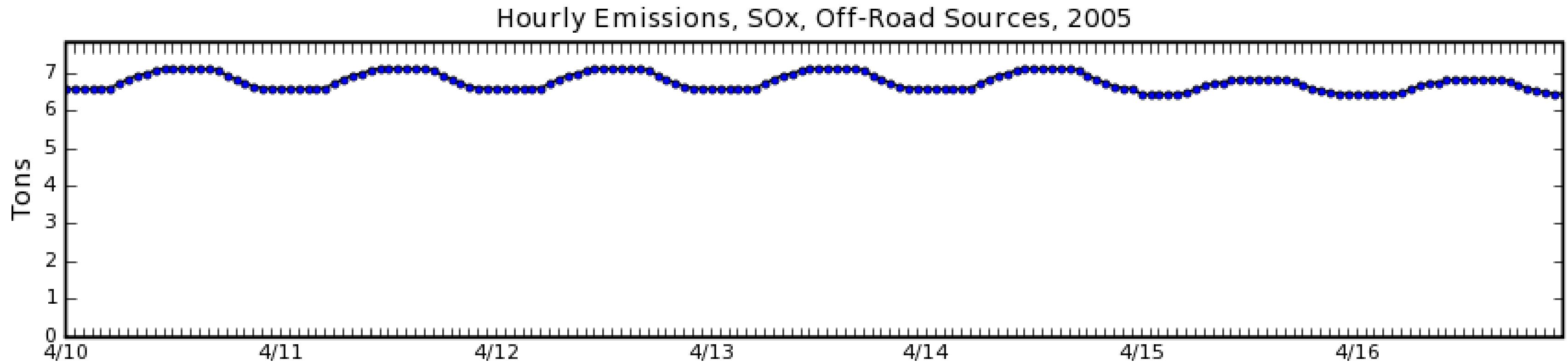


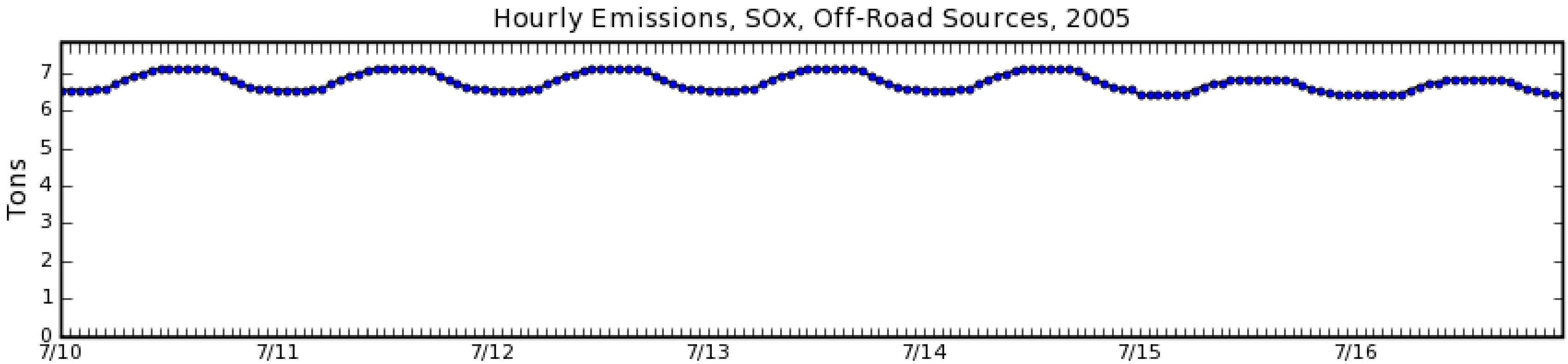
Hourly Emissions, SOx, On-Road Sources, 2005
Tons
0.0
0.2
0.4
0.6
0.8
7/10
7/11
7/12
7/13
7/14
7/15
7/16

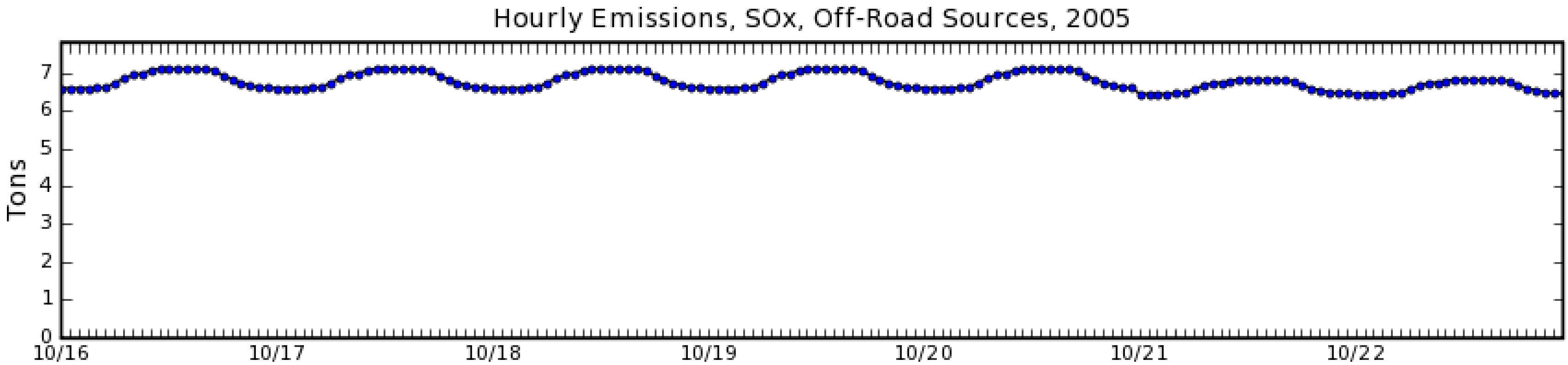



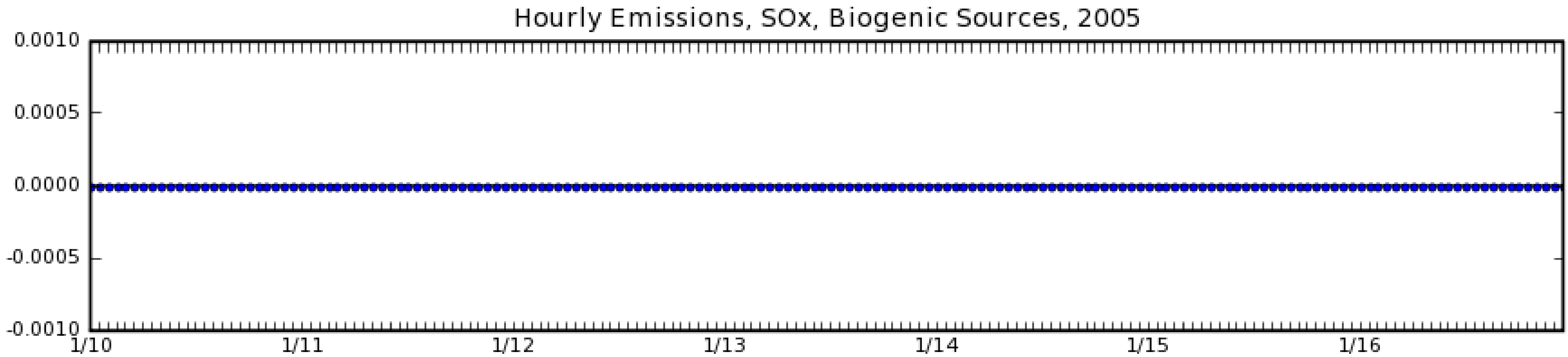
Hourly Emissions, SOx, On-Road Sources, 2005
Tons
0.0
0.2
0.4
0.6
0.8
10/16
10/17
10/18
10/19
10/20
10/21
10/22

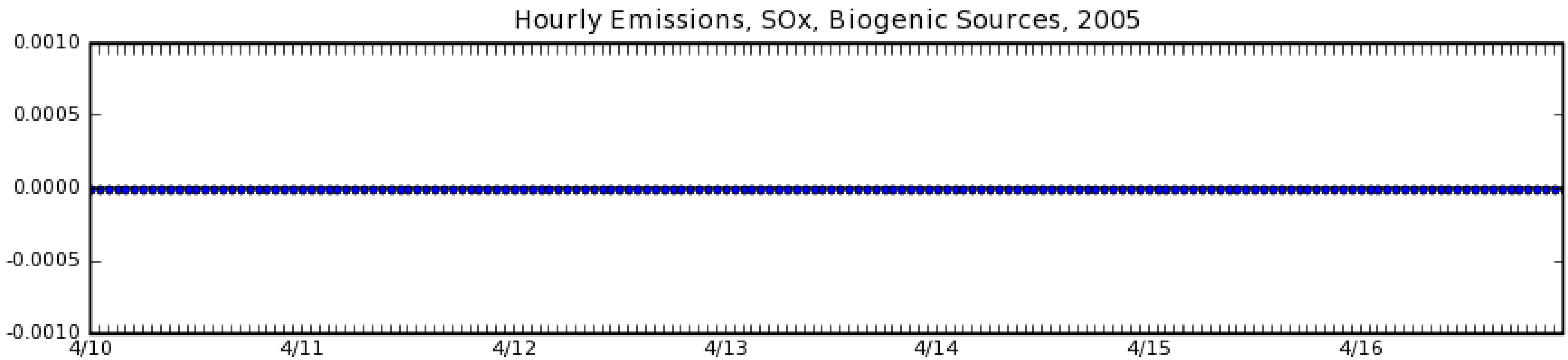

Hourly Emissions, SOx, Off-Road Sources, 2005
Tons
0
1
2
3
4
5
6
7
1/10
1/11
1/12
1/13
1/14
1/15
1/16

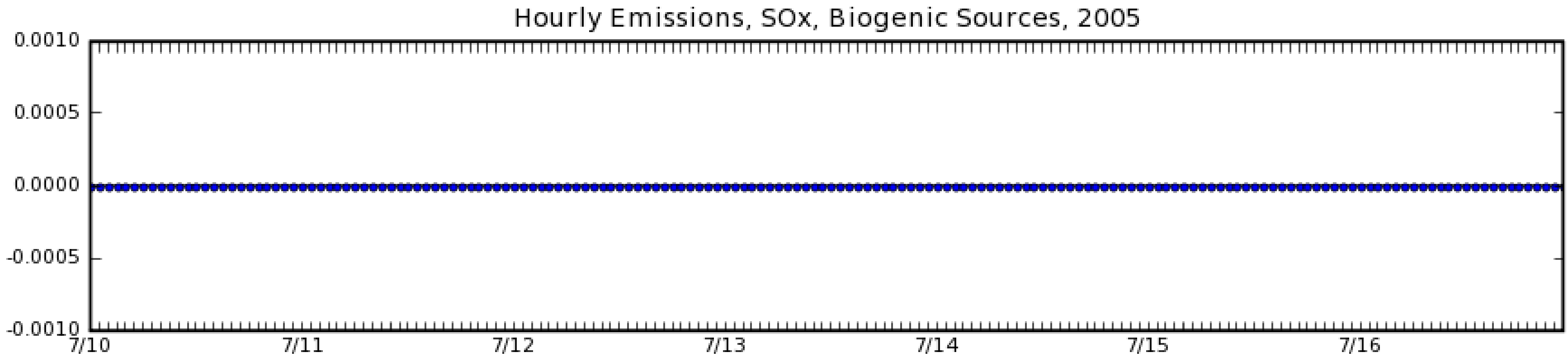

Hourly Emissions, SOx, Off-Road Sources, 2005
Tons
0
1
2
3
4
5
6
7
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, SOx, Off-Road Sources, 2005
Tons
0
1
2
3
4
5
6
7
7/10
7/11
7/12
7/13
7/14
7/15
7/16

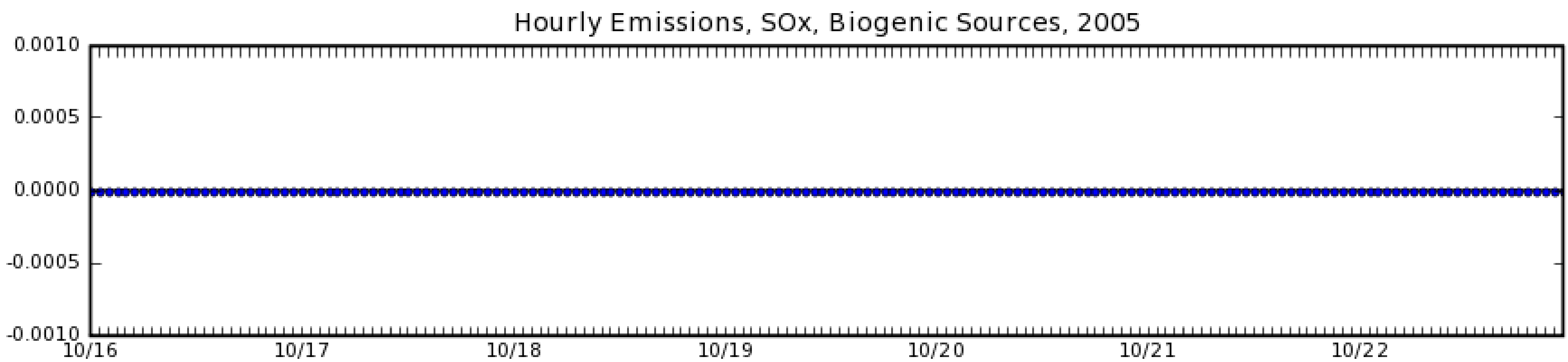

Hourly Emissions, SOx, Off-Road Sources, 2005
Tons
0
1
2
3
4
5
6
7
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, SOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, SOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16

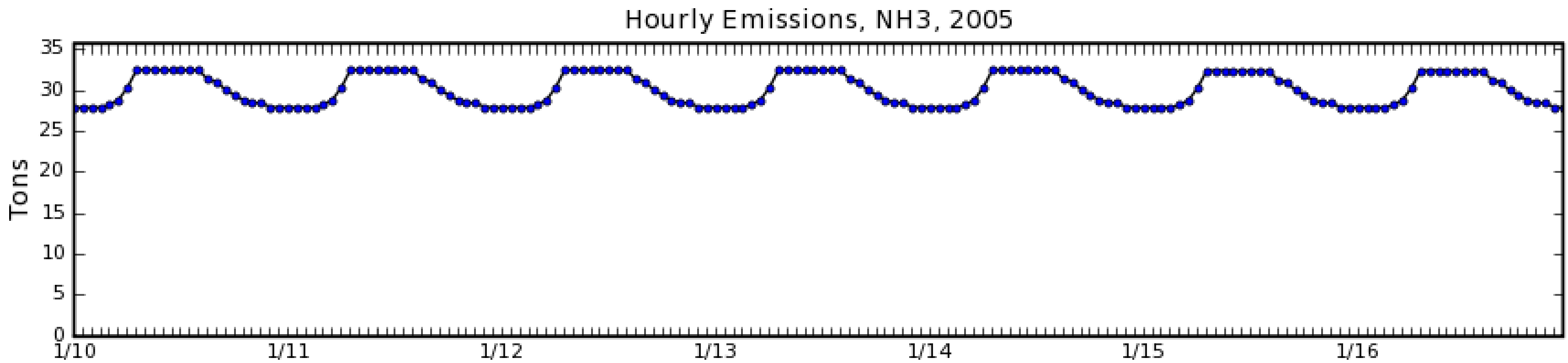


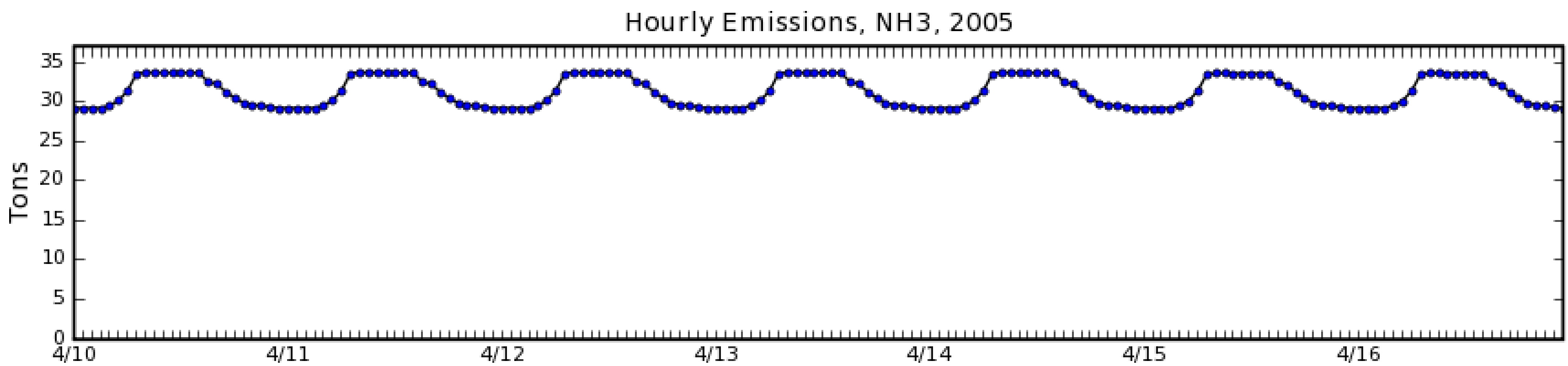
Hourly Emissions, SOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

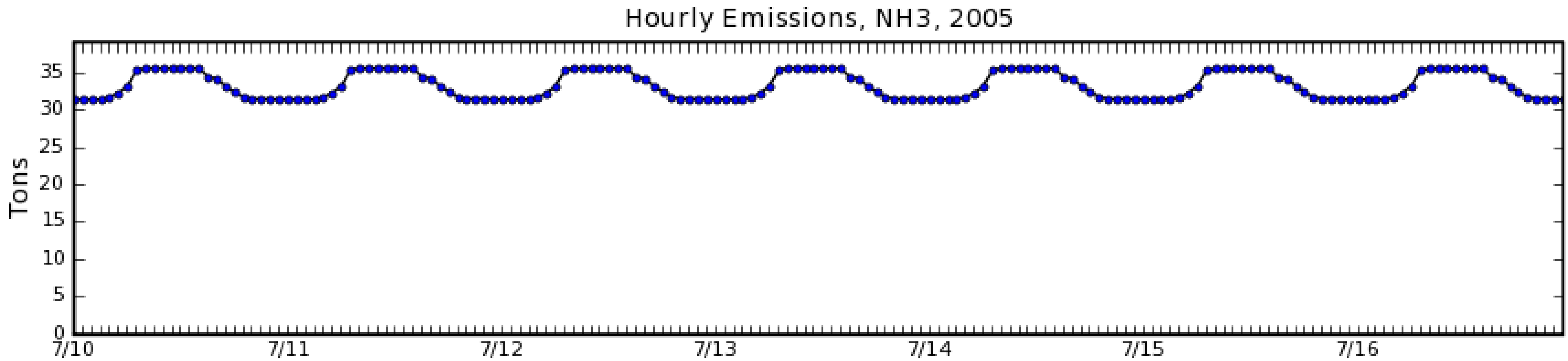



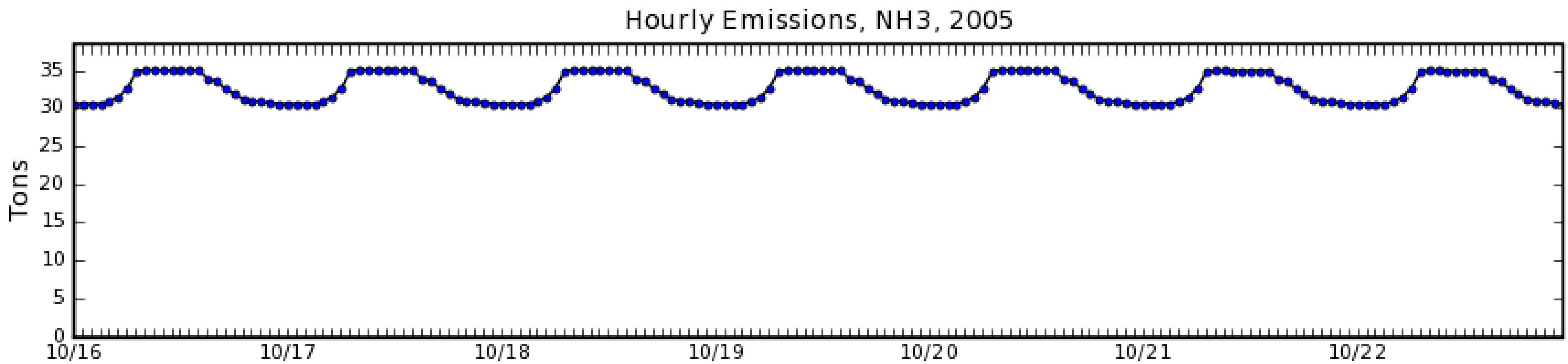
Hourly Emissions, SOx, Biogenic Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

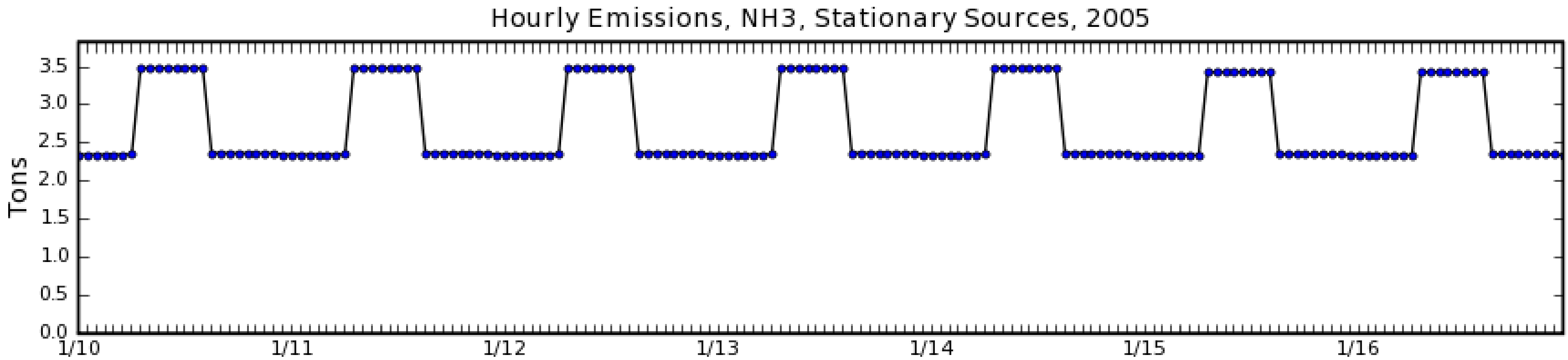
**Figure 3.68. Daily Emissions of NH3 in 2005**



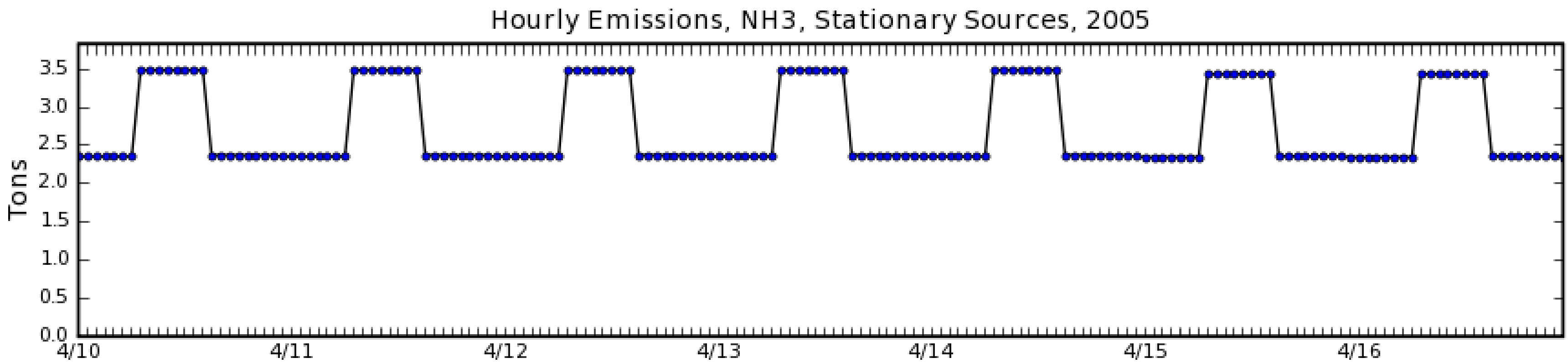




Hourly Emissions, NH3, 2005
Tons
0
5
10
15
20
25
30
35
7/10
7/11
7/12
7/13
7/14
7/15
7/16

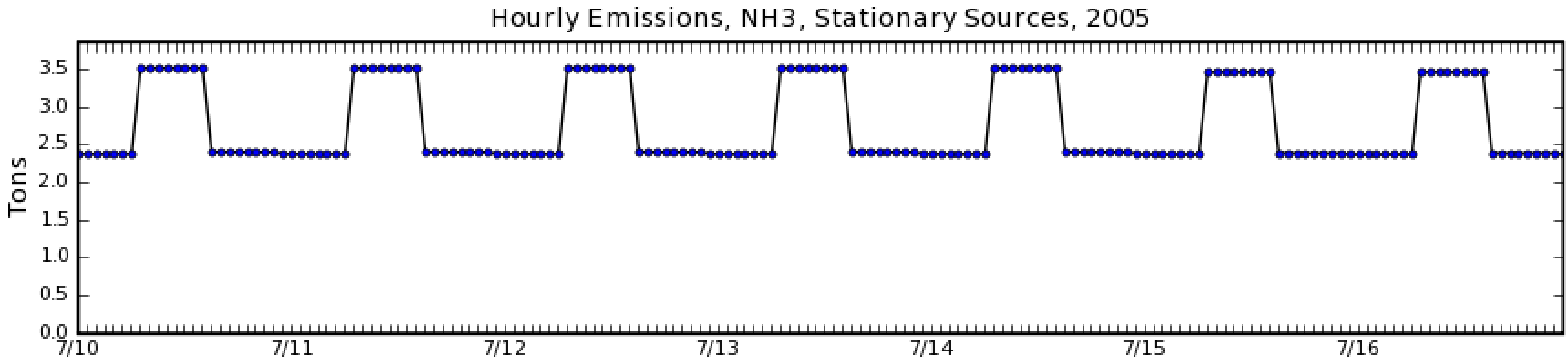

Hourly Emissions, NH3, 2005
Tons
0
5
10
15
20
25
30
35
10/16
10/17
10/18
10/19
10/20
10/21
10/22

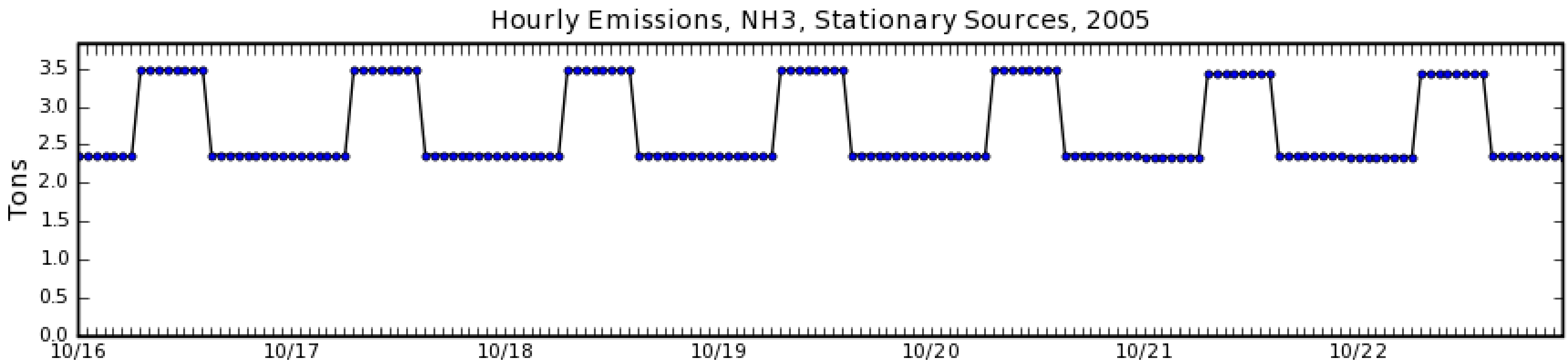


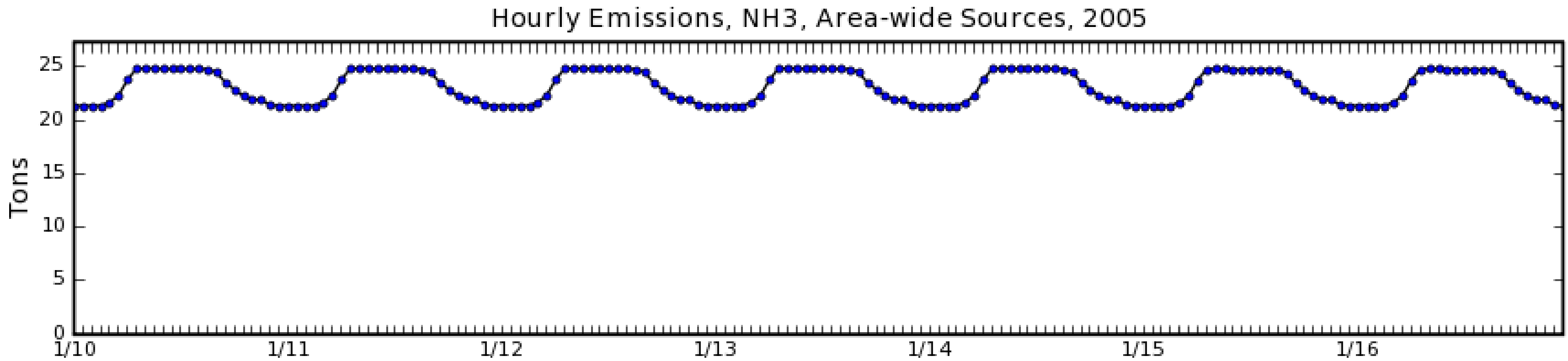
Hourly Emissions, NH3, Stationary Sources, 2005
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

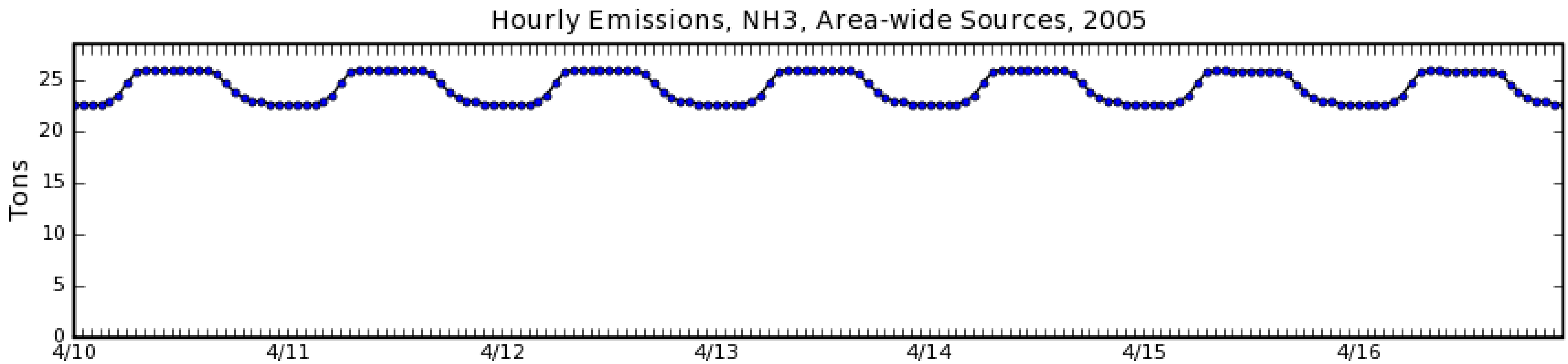



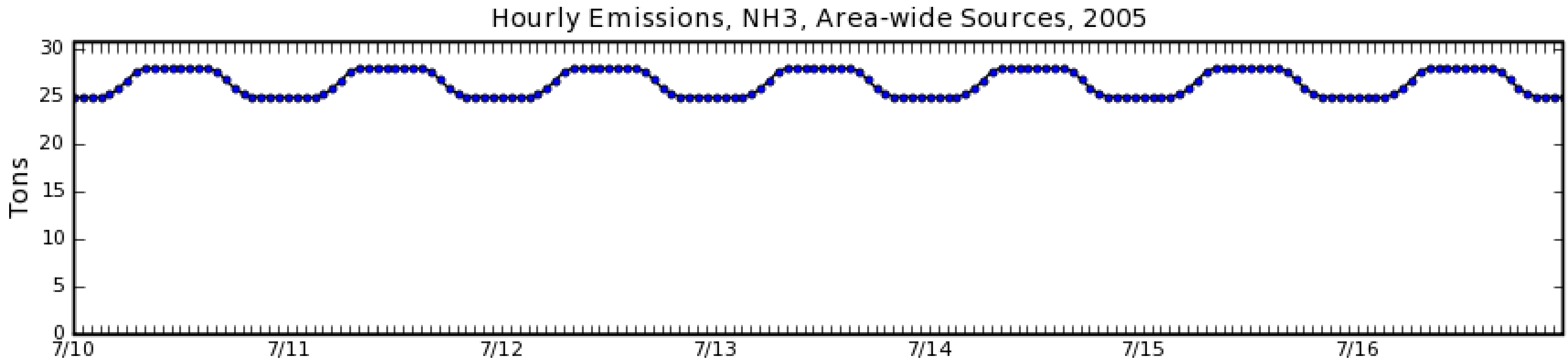
Hourly Emissions, NH3, Stationary Sources, 2005
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

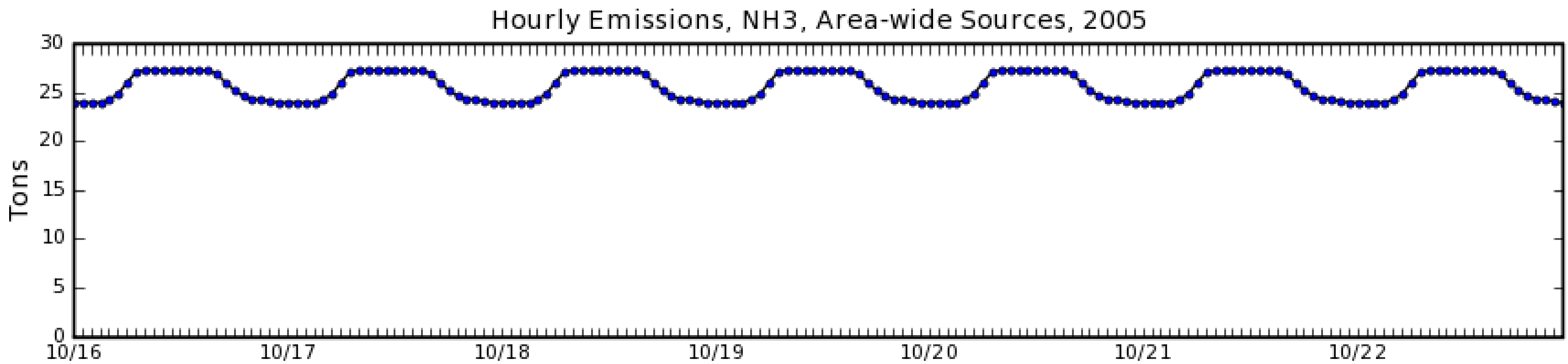

Hourly Emissions, NH3, Stationary Sources, 2005
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

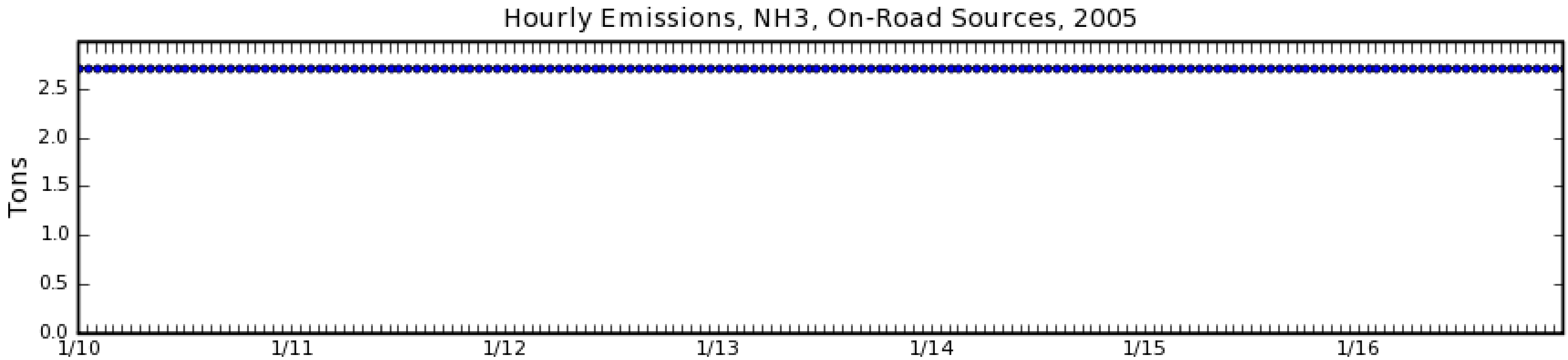

Hourly Emissions, NH3, Stationary Sources, 2005
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

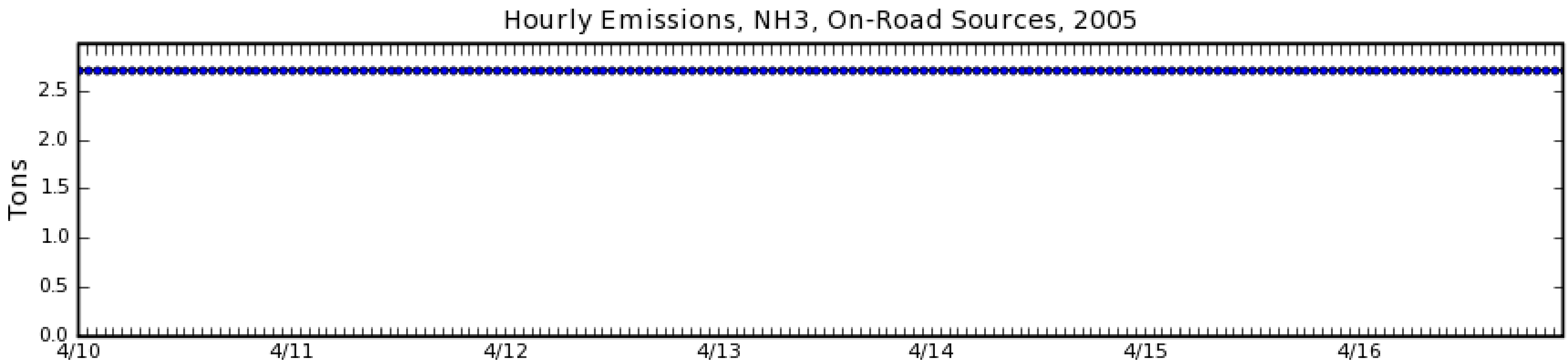

Hourly Emissions, NH3, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
1/10
1/11
1/12
1/13
1/14
1/15
1/16

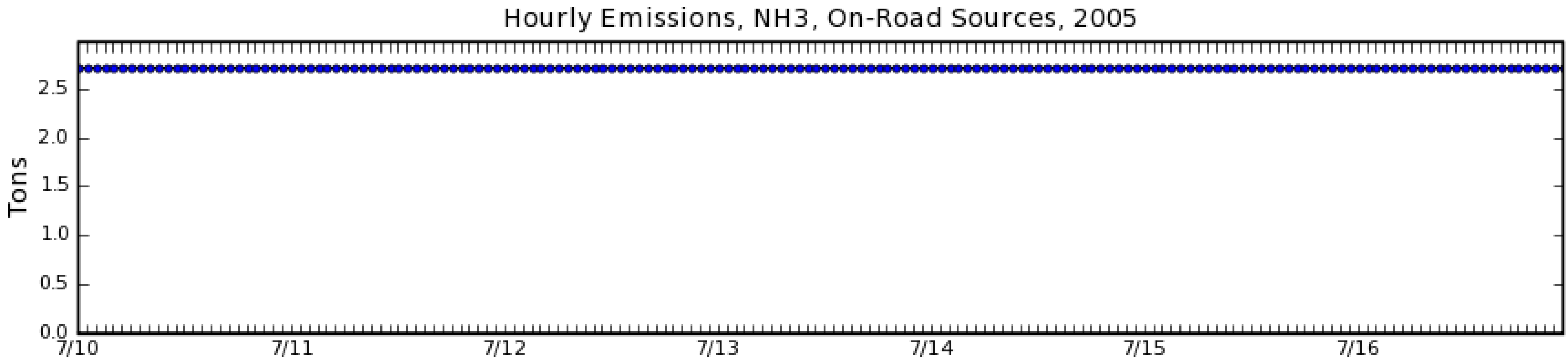

Hourly Emissions, NH3, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
4/10
4/11
4/12
4/13
4/14
4/15
4/16

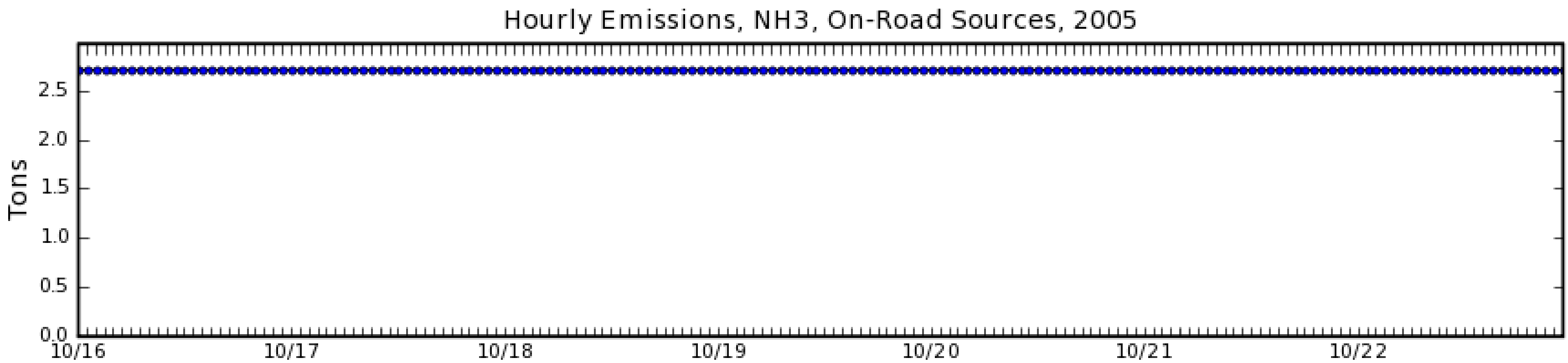

Hourly Emissions, NH3, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
30
7/10
7/11
7/12
7/13
7/14
7/15
7/16

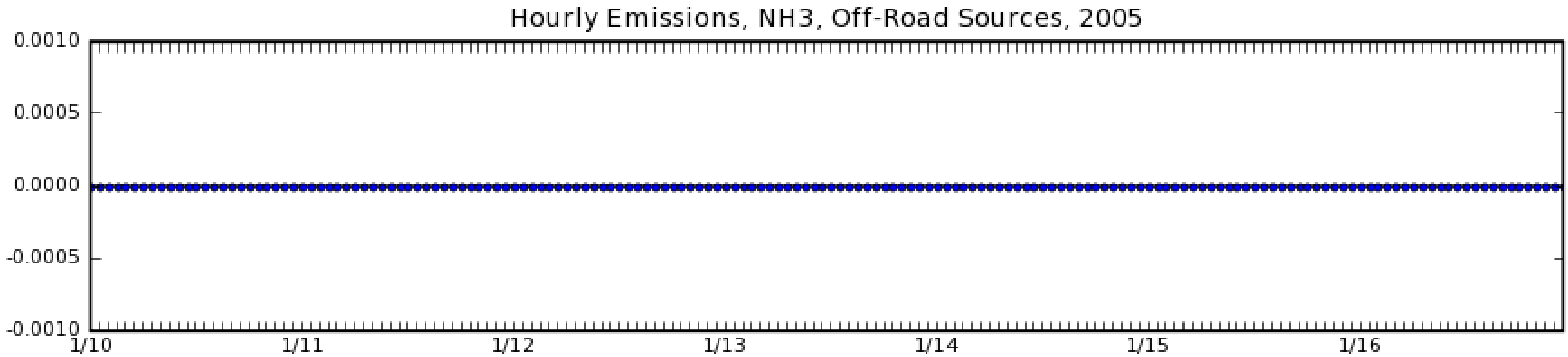

Hourly Emissions, NH3, Area-wide Sources, 2005
Tons
0
5
10
15
20
25
30
10/16
10/17
10/18
10/19
10/20
10/21
10/22

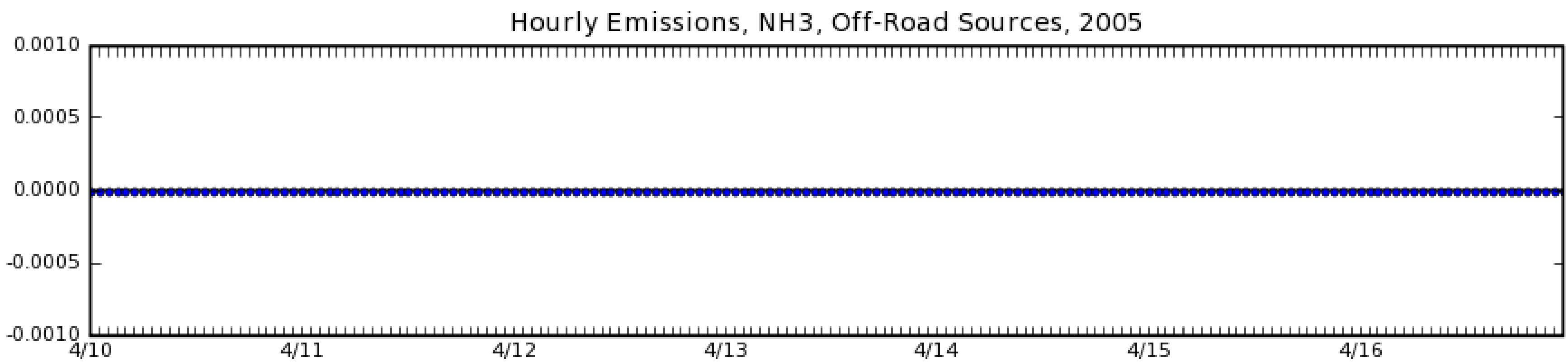

Hourly Emissions, NH3, On-Road Sources, 2005
Tons
0.0
0.5
1.0
1.5
2.0
2.5
1/10
1/11
1/12
1/13
1/14
1/15
1/16

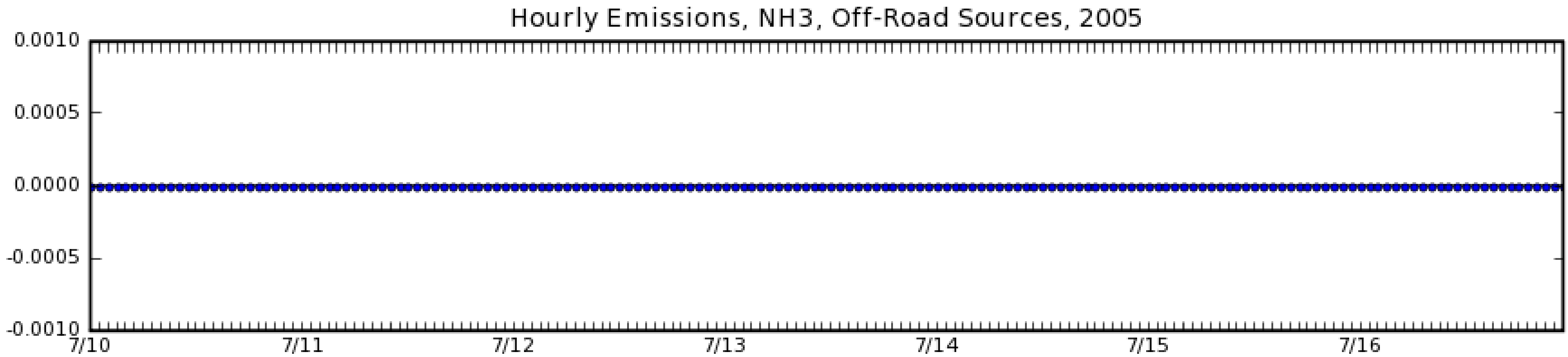

Hourly Emissions, NH3, On-Road Sources, 2005
Tons
0.0
0.5
1.0
1.5
2.0
2.5
4/10
4/11
4/12
4/13
4/14
4/15
4/16

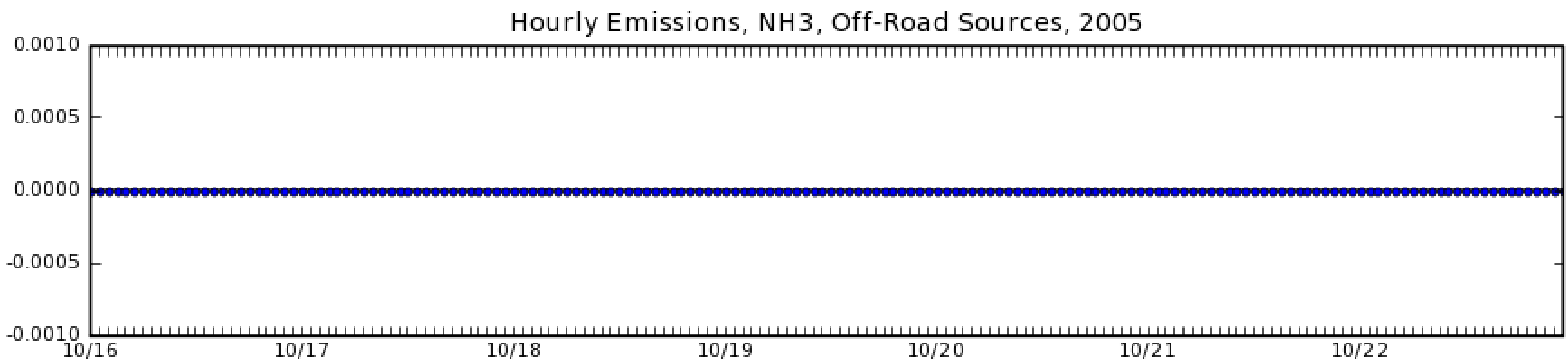

Hourly Emissions, NH3, On-Road Sources, 2005
Tons
0.0
0.5
1.0
1.5
2.0
2.5
7/10
7/11
7/12
7/13
7/14
7/15
7/16

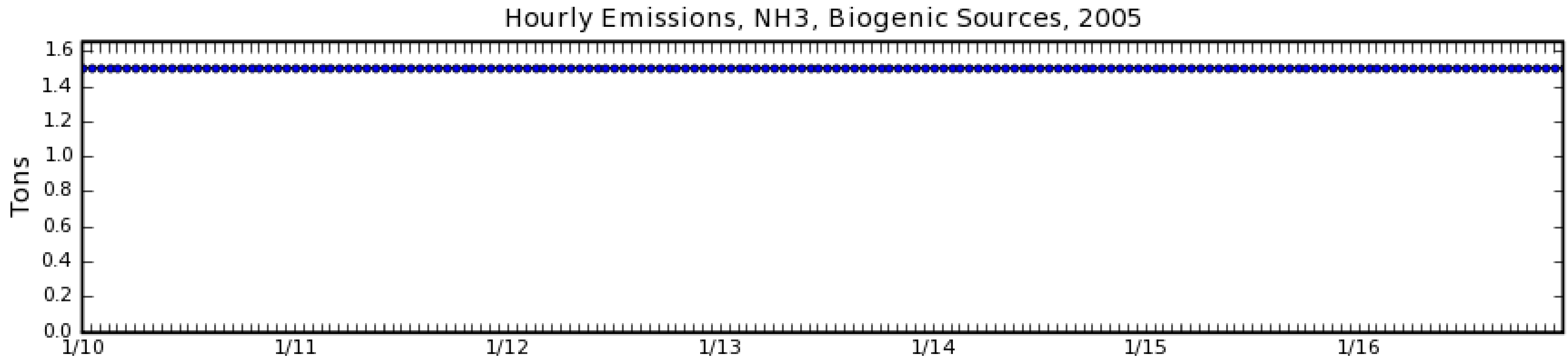

Hourly Emissions, NH3, On-Road Sources, 2005
Tons
0.0
0.5
1.0
1.5
2.0
2.5
10/16
10/17
10/18
10/19
10/20
10/21
10/22

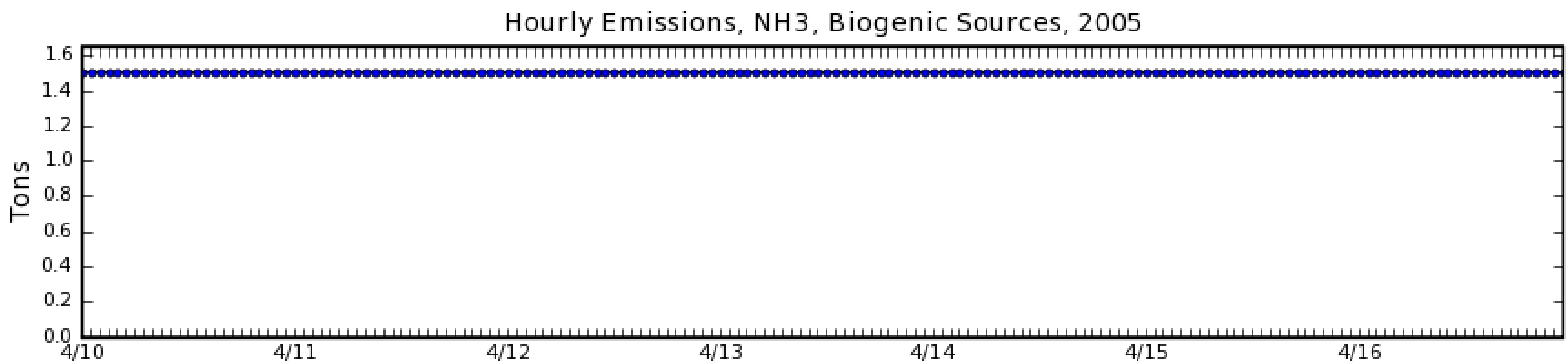

Hourly Emissions, NH3, Off-Road Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16

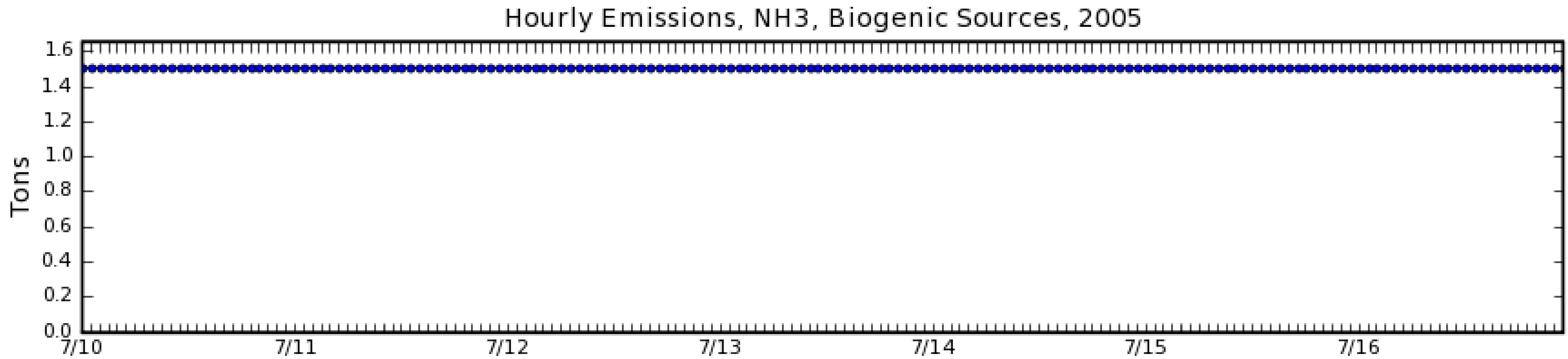

Hourly Emissions, NH3, Off-Road Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NH3, Off-Road Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

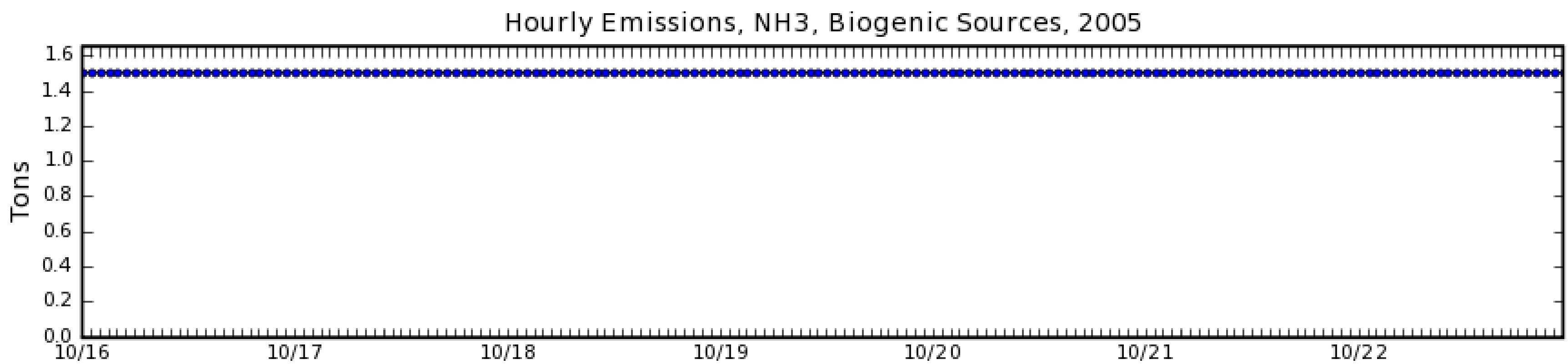

Hourly Emissions, NH3, Off-Road Sources, 2005
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NH3, Biogenic Sources, 2005
Tons
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, NH3, Biogenic Sources, 2005
Tons
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
4/10
4/11
4/12
4/13
4/14
4/15
4/16

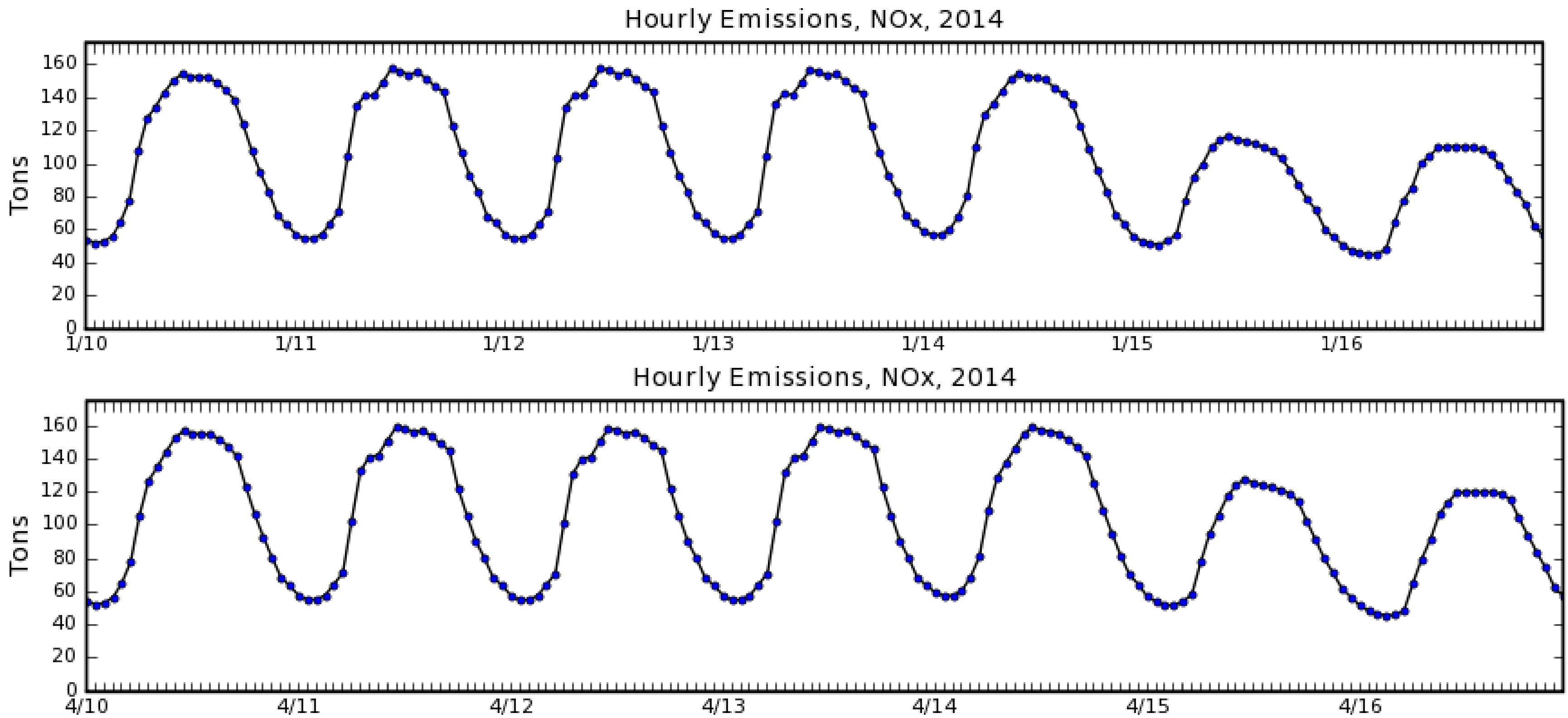


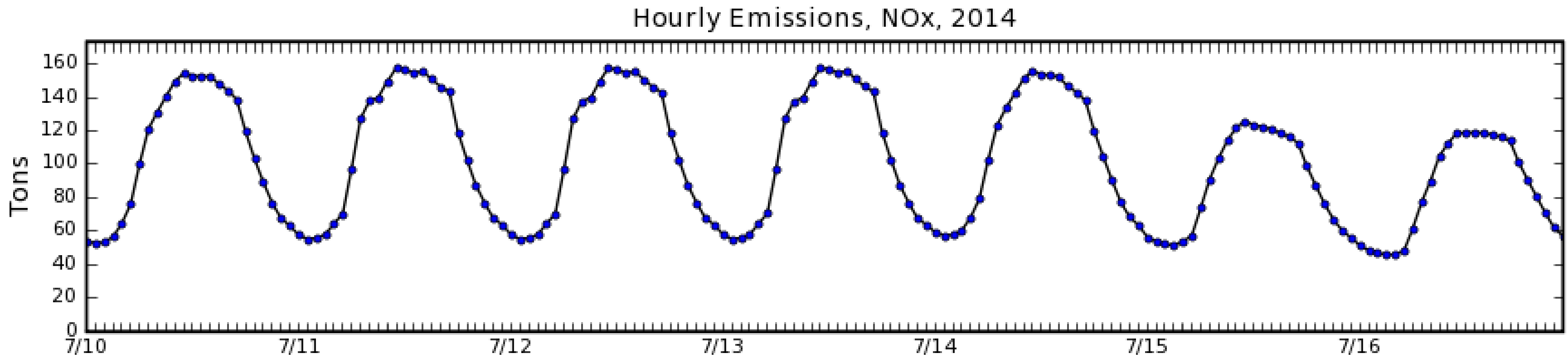
Hourly Emissions, NH3, Biogenic Sources, 2005
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

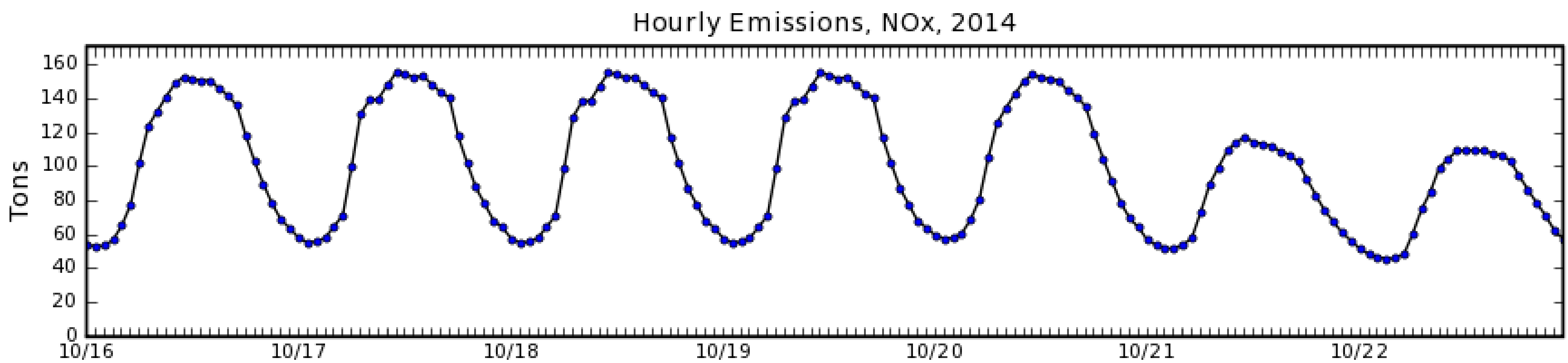



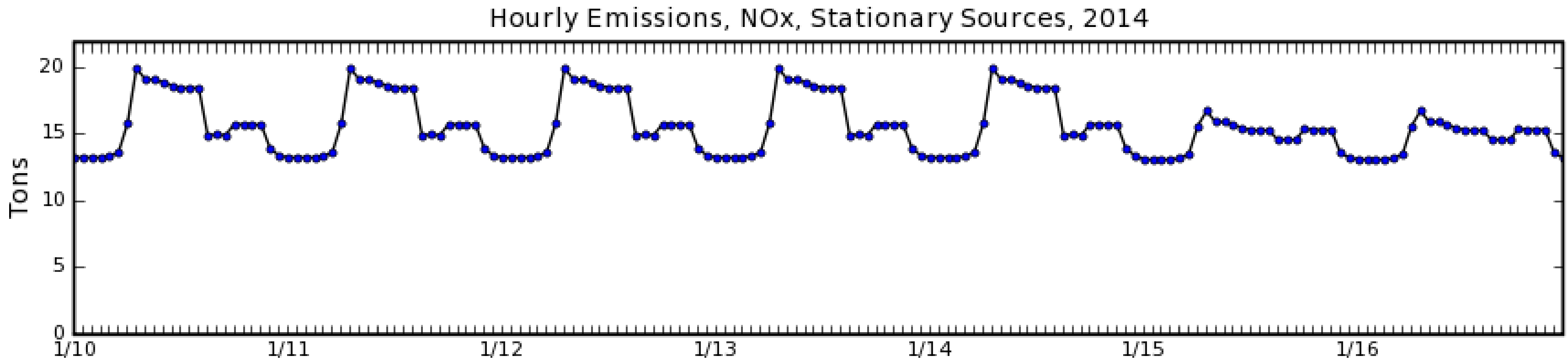
Hourly Emissions, NH3, Biogenic Sources, 2005
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

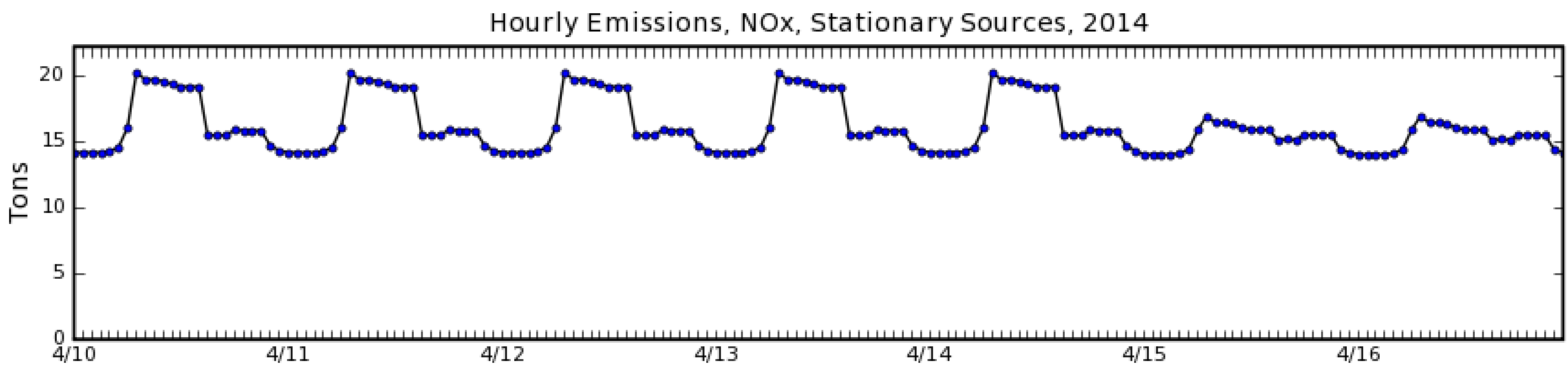
**Figure 3.69. Daily Emissions of NOx in 2014**

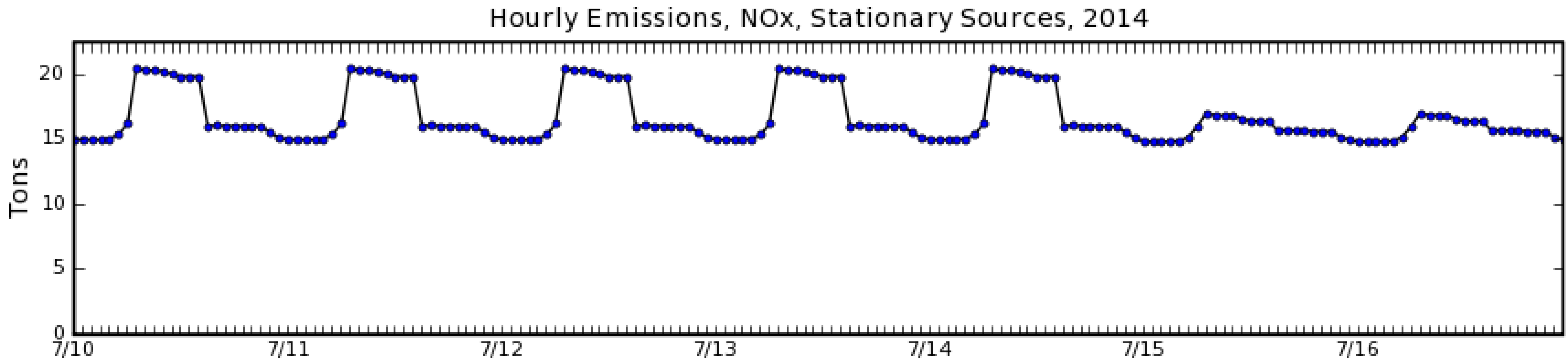


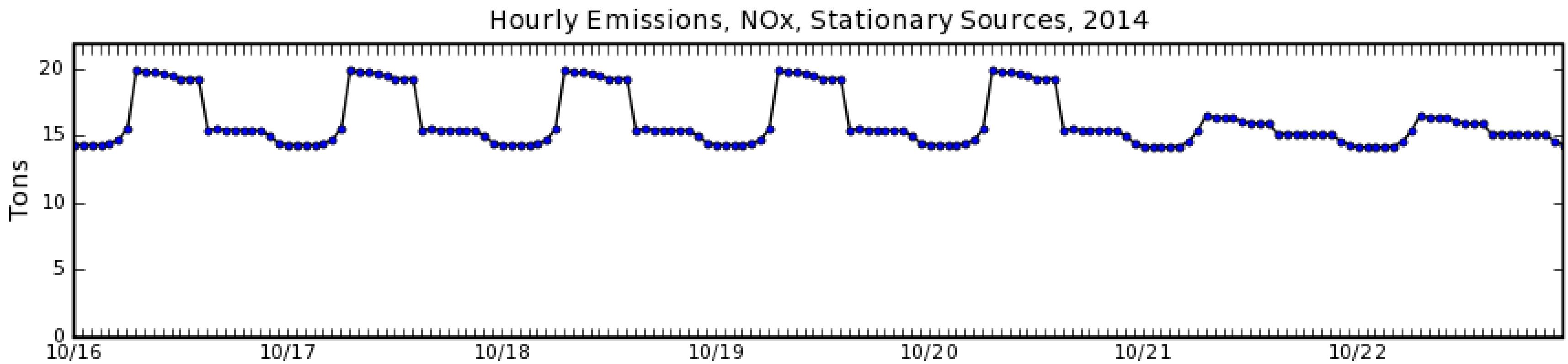

Hourly Emissions, NOx, 2014
Tons
0
20
40
60
80
100
120
140
160
7/10
7/11
7/12
7/13
7/14
7/15
7/16

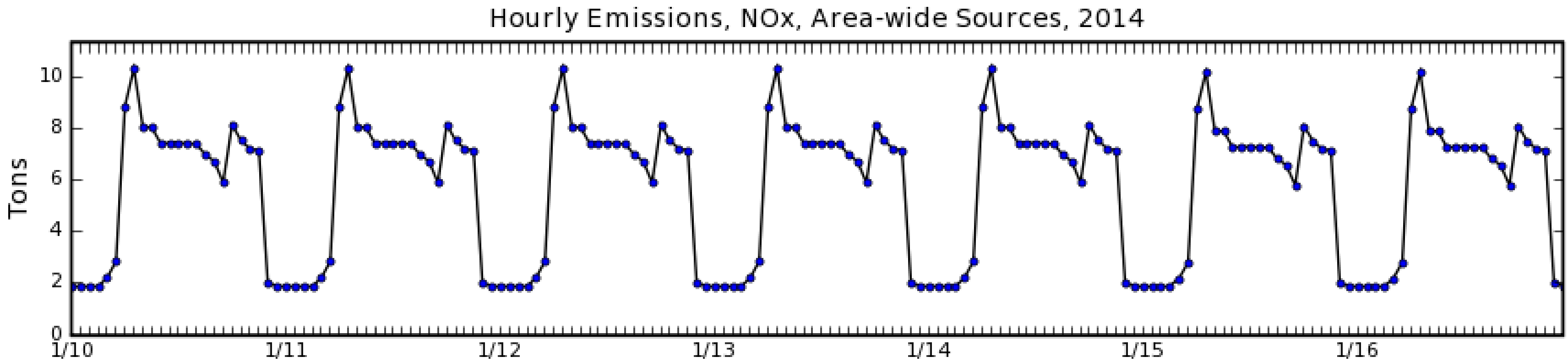

Hourly Emissions, NOx, 2014
Tons
0
20
40
60
80
100
120
140
160
10/16
10/17
10/18
10/19
10/20
10/21
10/22

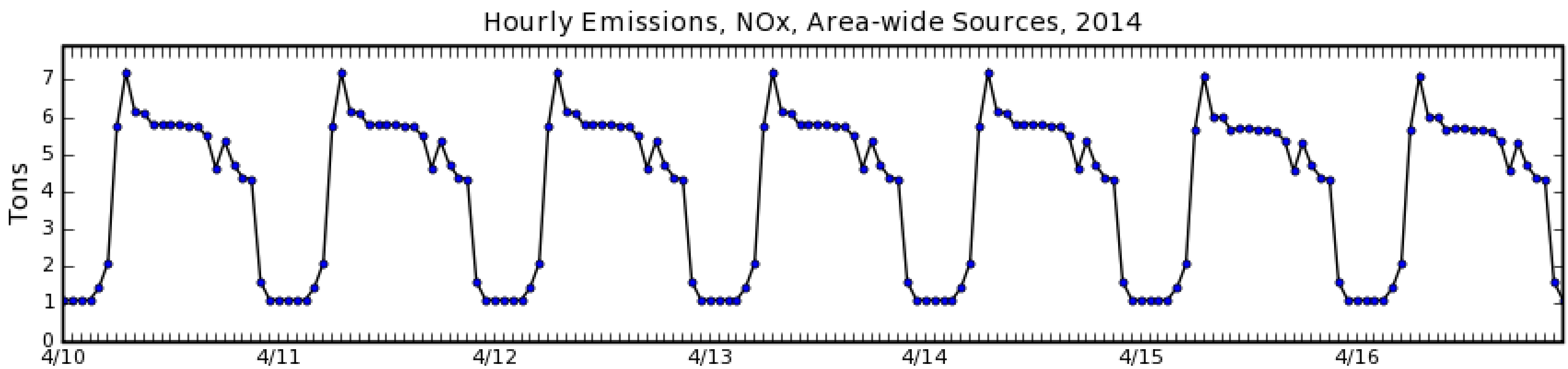

Hourly Emissions, NOx, Stationary Sources, 2014
Tons
0
5
10
15
20
1/10
1/11
1/12
1/13
1/14
1/15
1/16

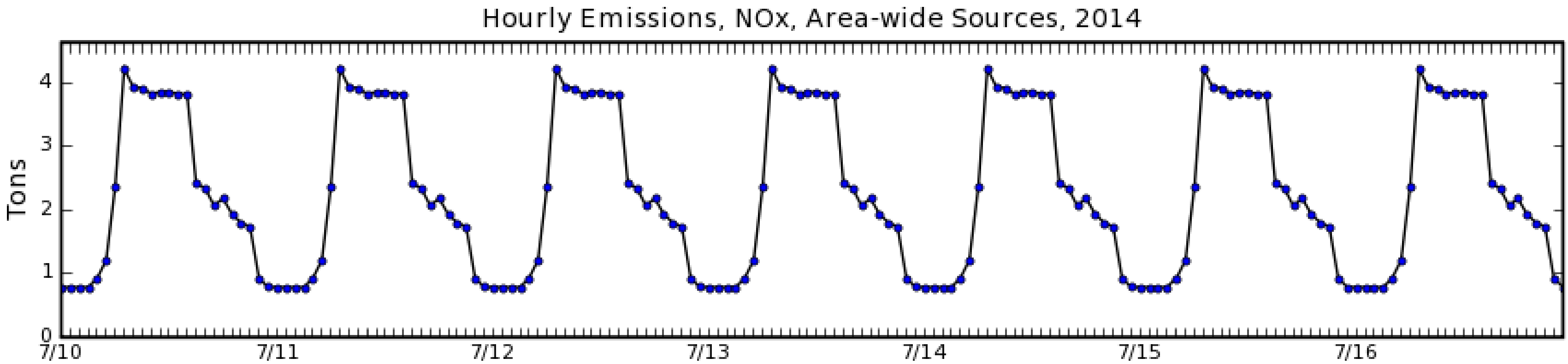

Hourly Emissions, NOx, Stationary Sources, 2014
Tons
0
5
10
15
20
4/10
4/11
4/12
4/13
4/14
4/15
4/16

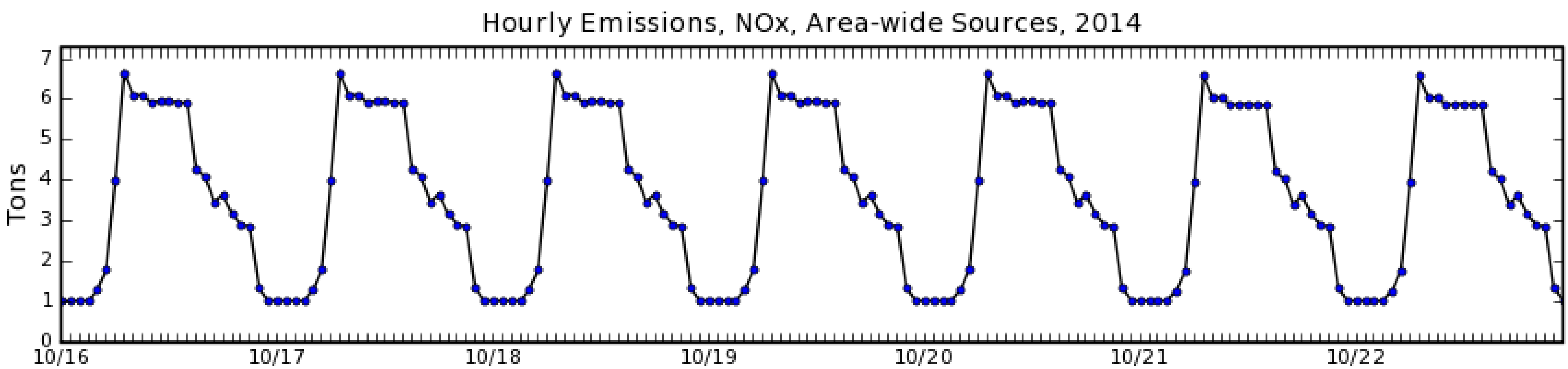

Hourly Emissions, NOx, Stationary Sources, 2014
Tons
0
5
10
15
20
7/10
7/11
7/12
7/13
7/14
7/15
7/16

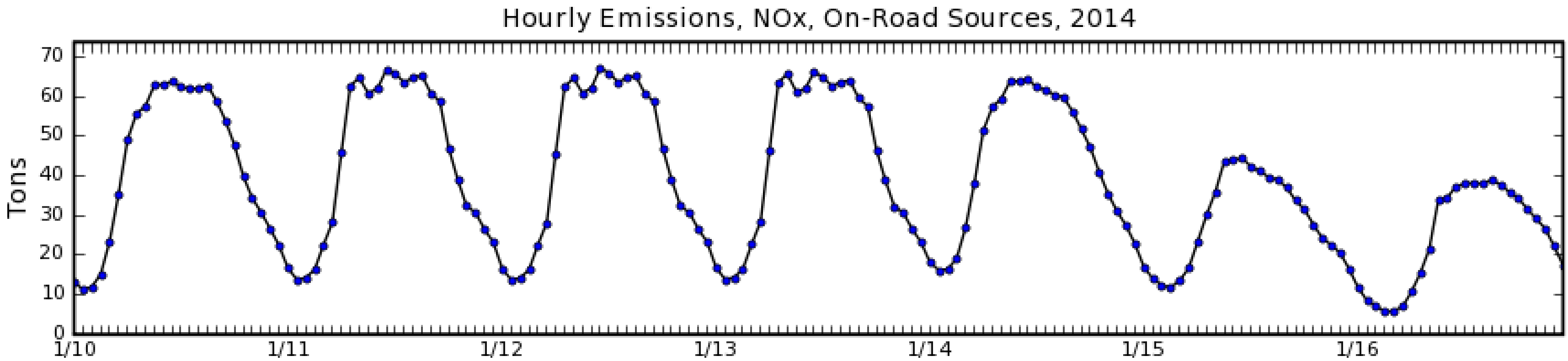

Hourly Emissions, NOx, Stationary Sources, 2014
Tons
0
5
10
15
20
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NOx, Area-wide Sources, 2014
Tons
0
2
4
6
8
10
1/10
1/11
1/12
1/13
1/14
1/15
1/16

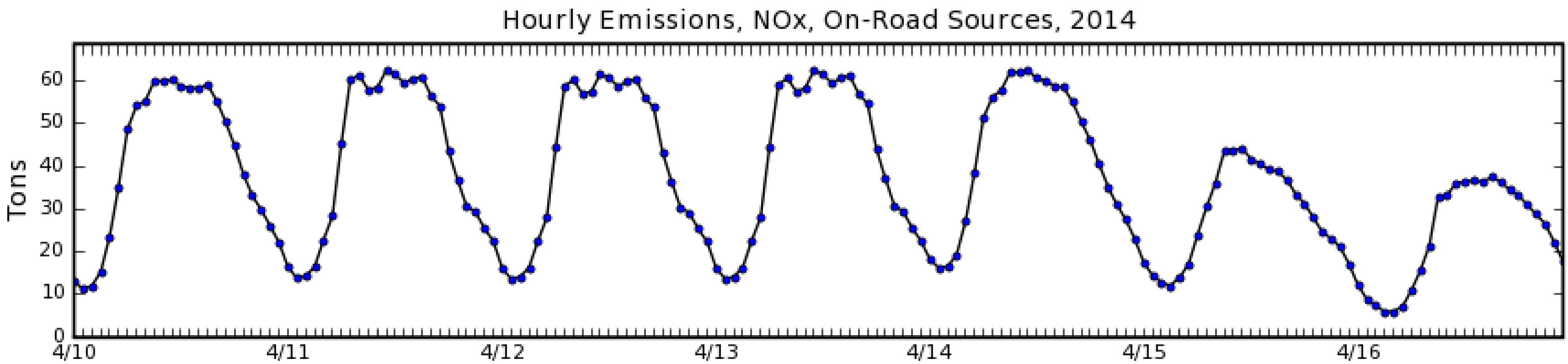

Hourly Emissions, NOx, Area-wide Sources, 2014
Tons
0
1
2
3
4
5
6
7
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NOx, Area-wide Sources, 2014
Tons
0
1
2
3
4
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, NOx, Area-wide Sources, 2014
Tons
0
1
2
3
4
5
6
7
10/16
10/17
10/18
10/19
10/20
10/21
10/22

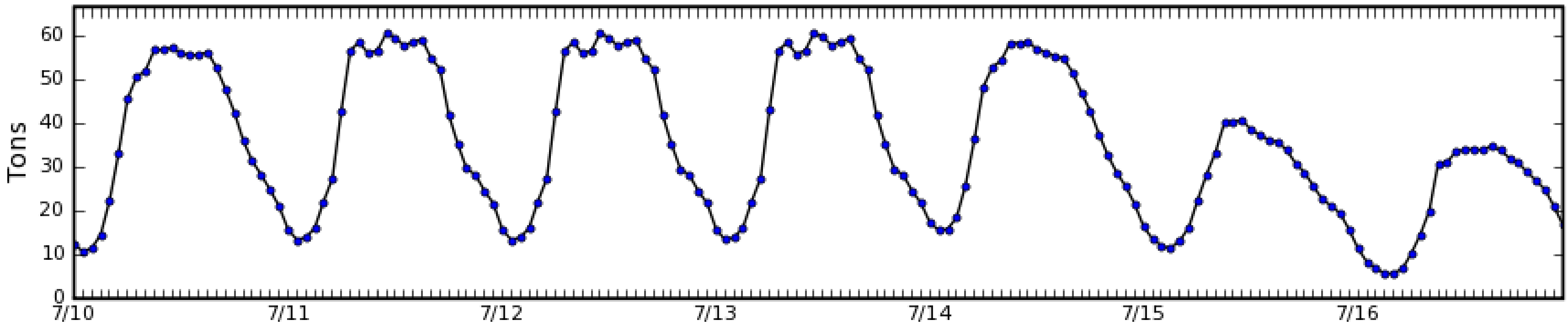


Hourly Emissions, NOx, On-Road Sources, 2014
Tons
0
10
20
30
40
50
60
70
1/10
1/11
1/12
1/13
1/14
1/15
1/16

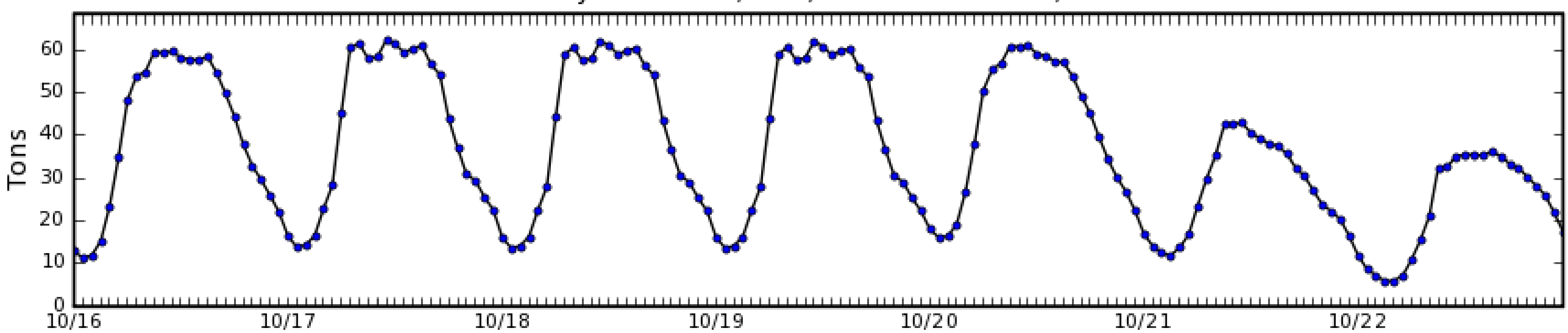



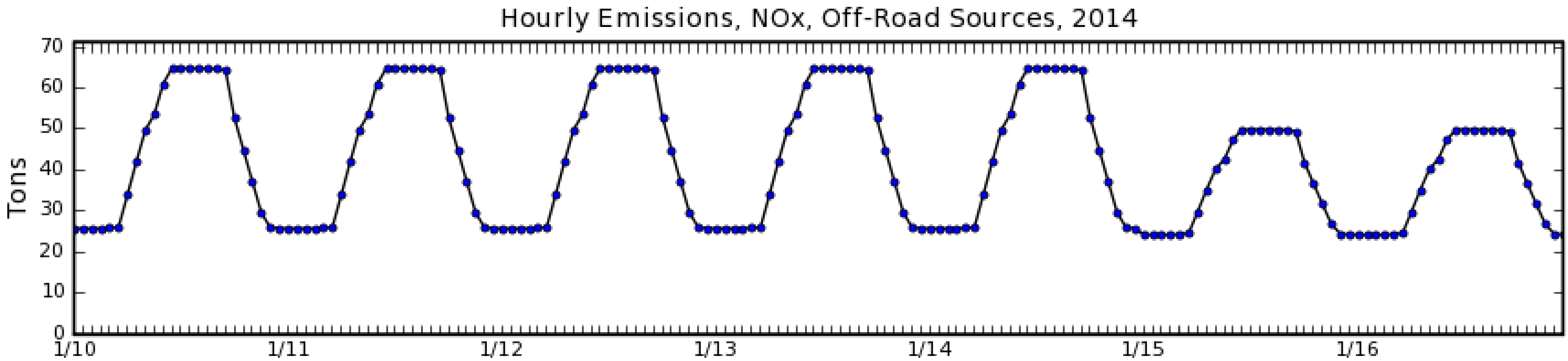
Hourly Emissions, NOx, On-Road Sources, 2014
Tons
0
10
20
30
40
50
60
4/10
4/11
4/12
4/13
4/14
4/15
4/16

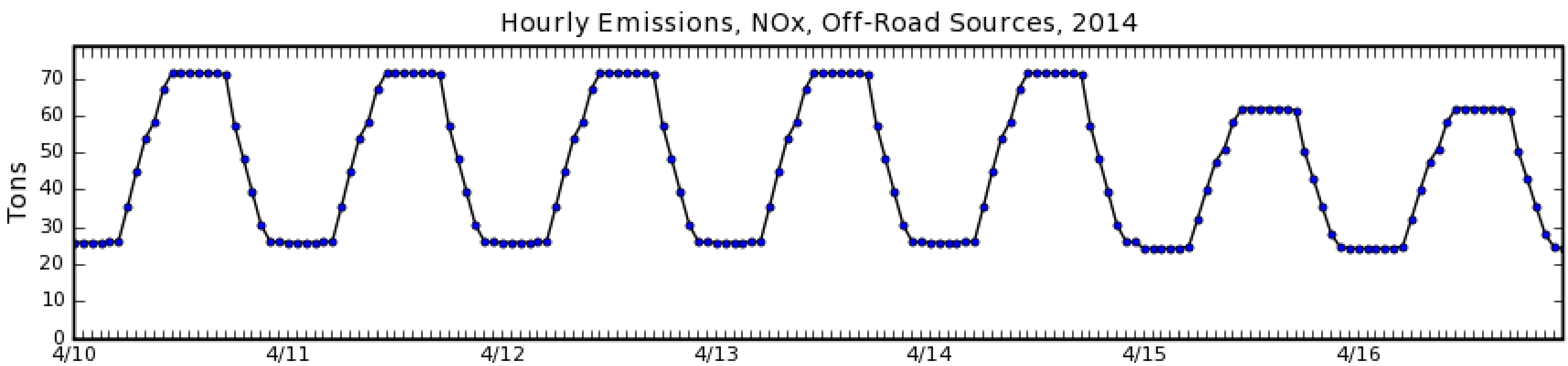
## Hourly Emissions, NOx, On-Road Sources, 2014

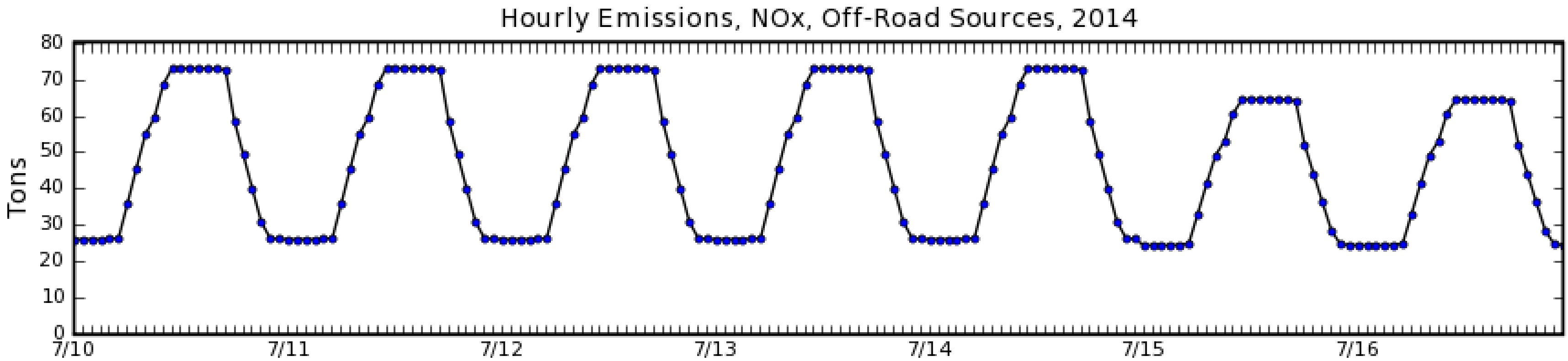


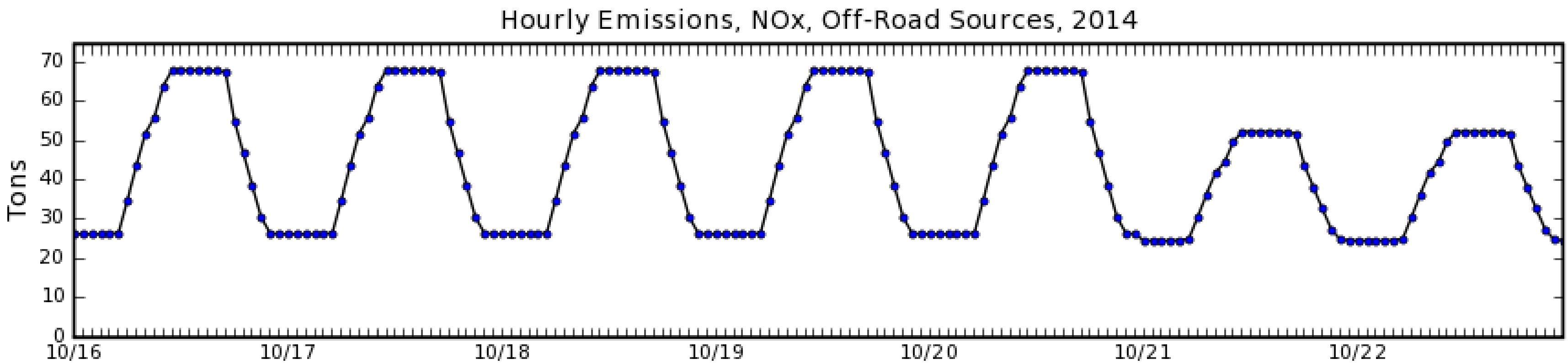

## Hourly Emissions, NOx, On-Road Sources, 2014

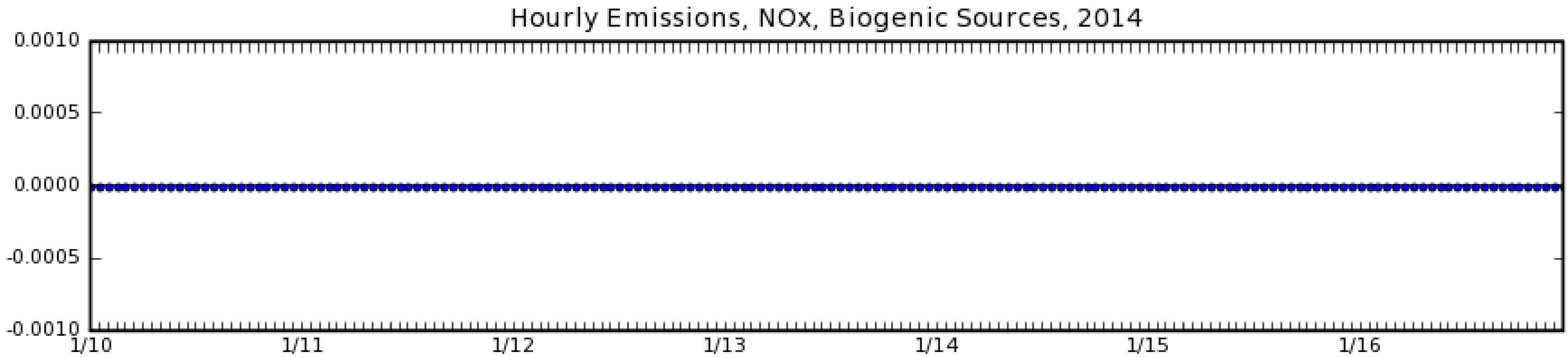


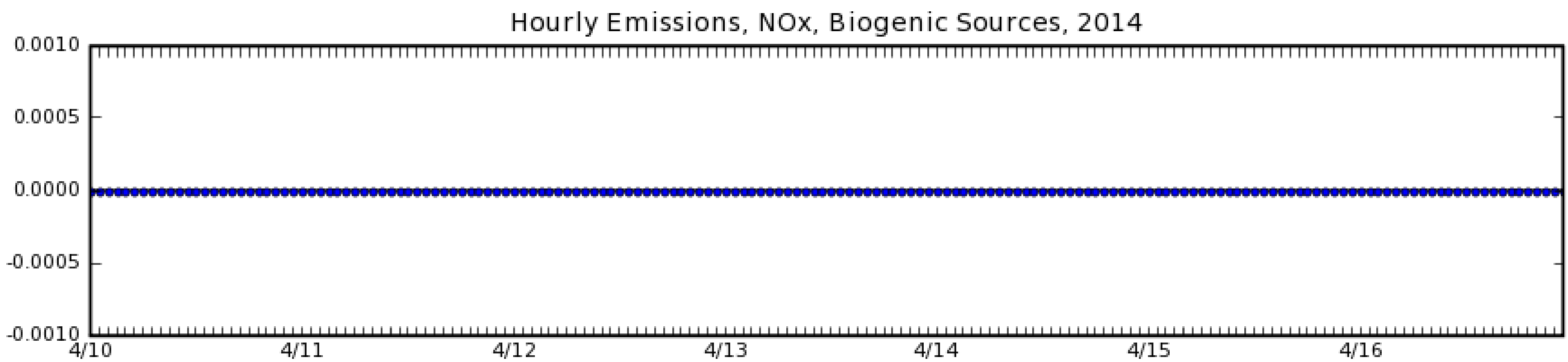

Hourly Emissions, NOx, Off-Road Sources, 2014
Tons
0
10
20
30
40
50
60
70
1/10
1/11
1/12
1/13
1/14
1/15
1/16

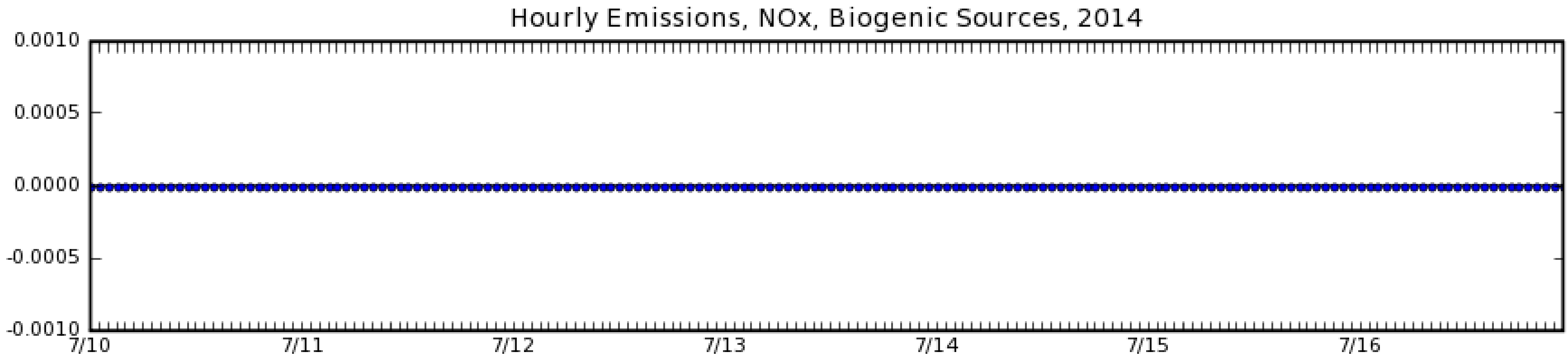

Hourly Emissions, NOx, Off-Road Sources, 2014
Tons
0
10
20
30
40
50
60
70
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NOx, Off-Road Sources, 2014
Tons
0
10
20
30
40
50
60
70
80
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, NOx, Off-Road Sources, 2014
Tons
0
10
20
30
40
50
60
70
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, NOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

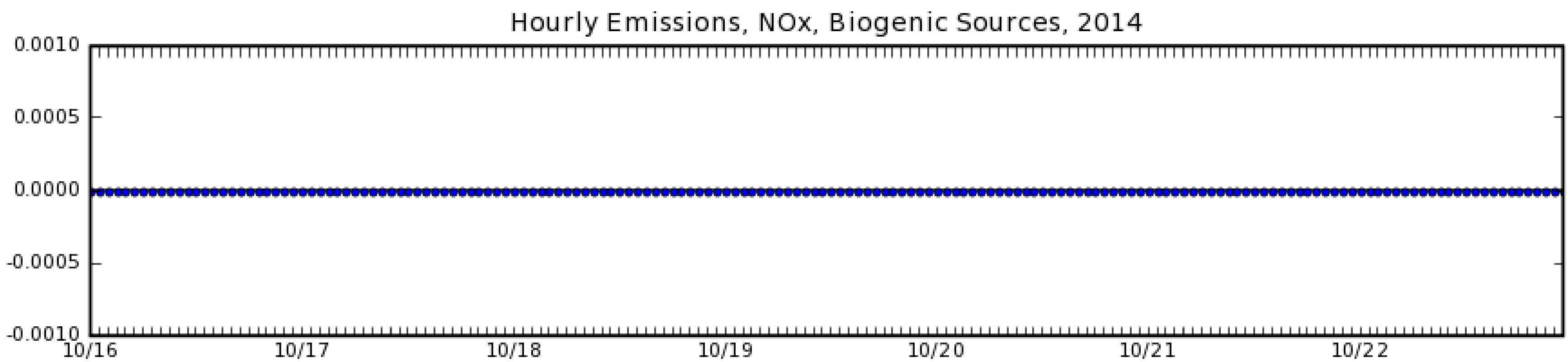
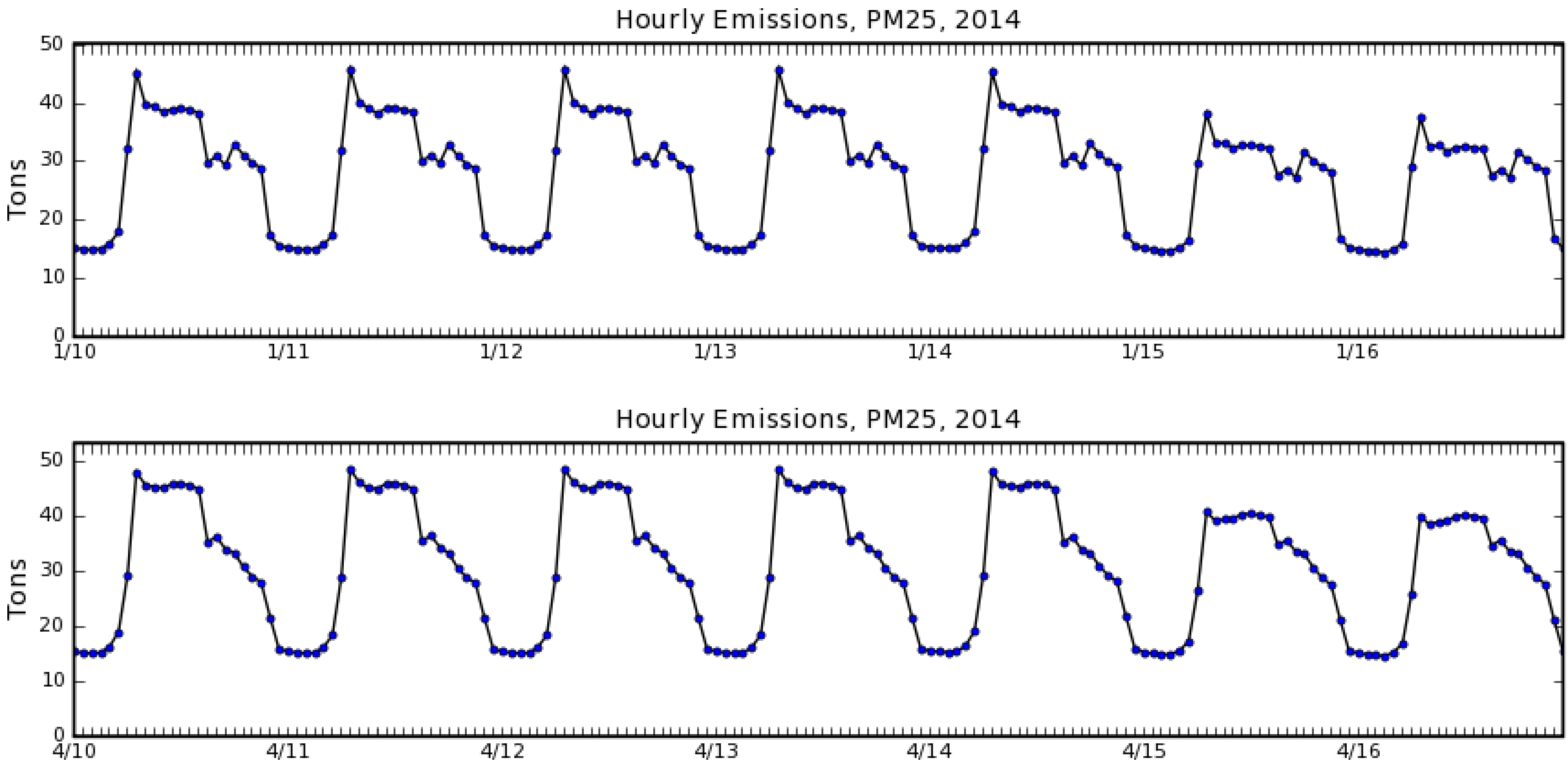
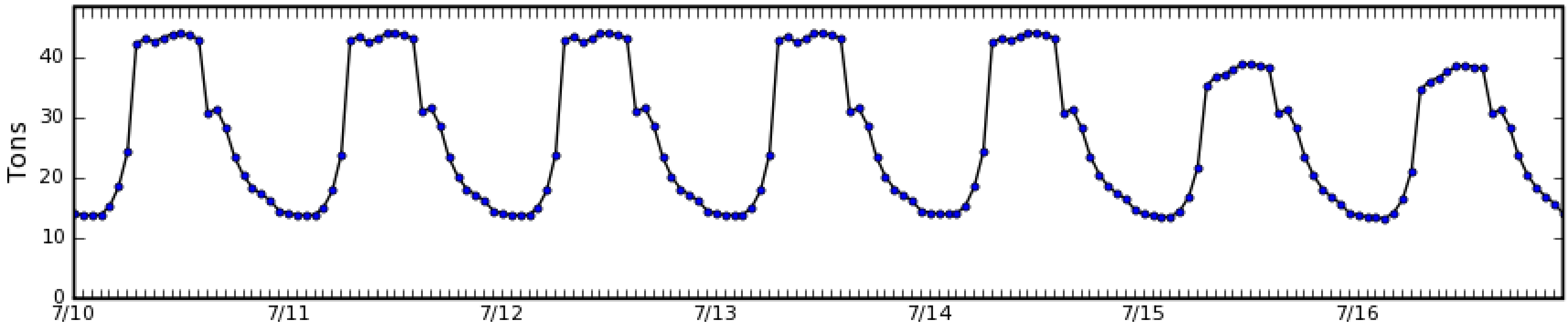

Hourly Emissions, NOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

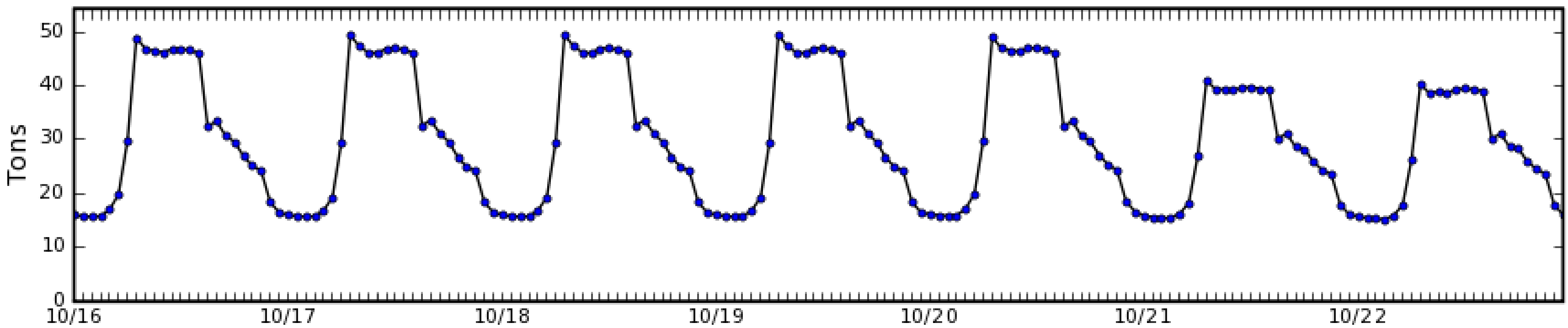
**Figure 3.70. Daily Emissions of PM2.5 in 2014**

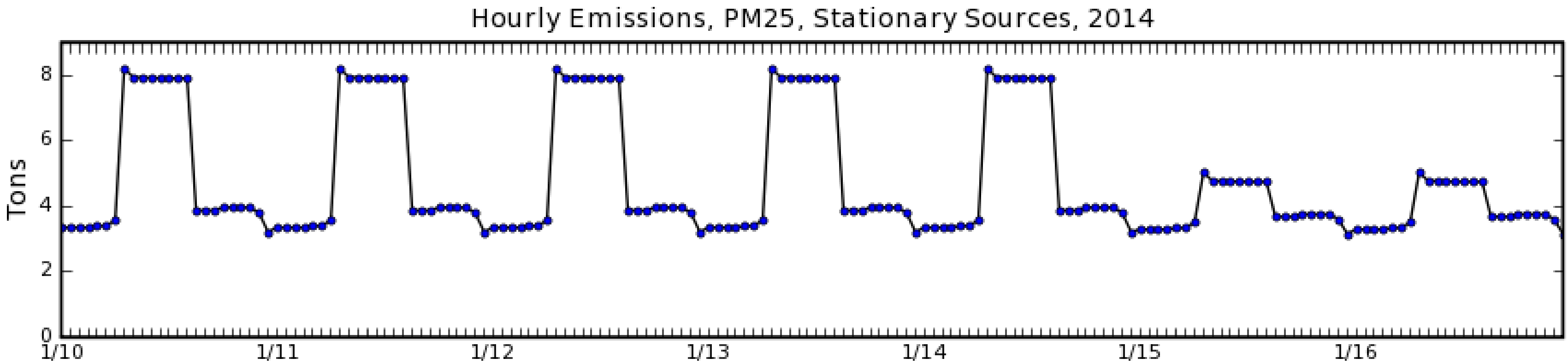


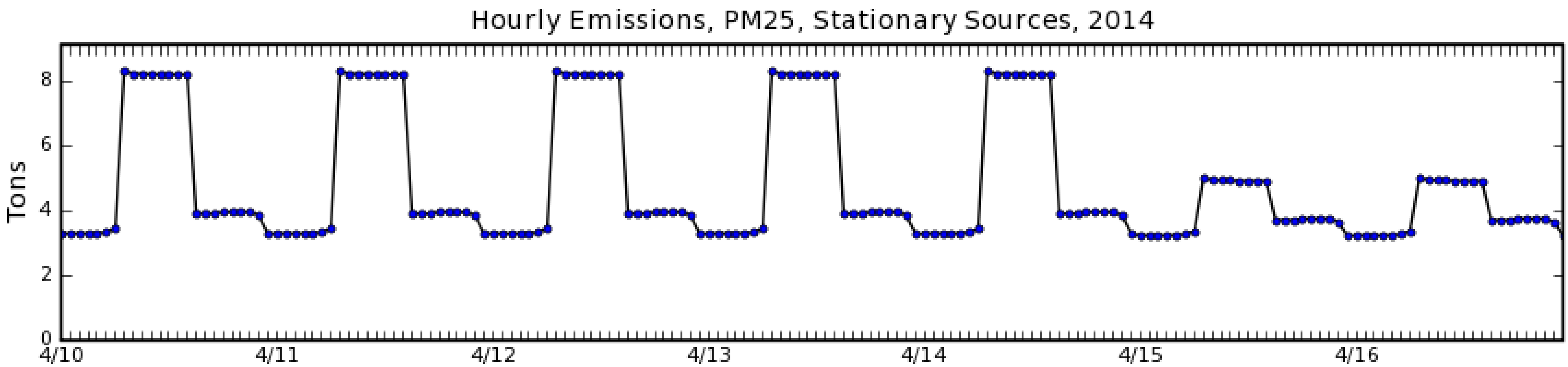
Hourly Emissions, PM25, 2014

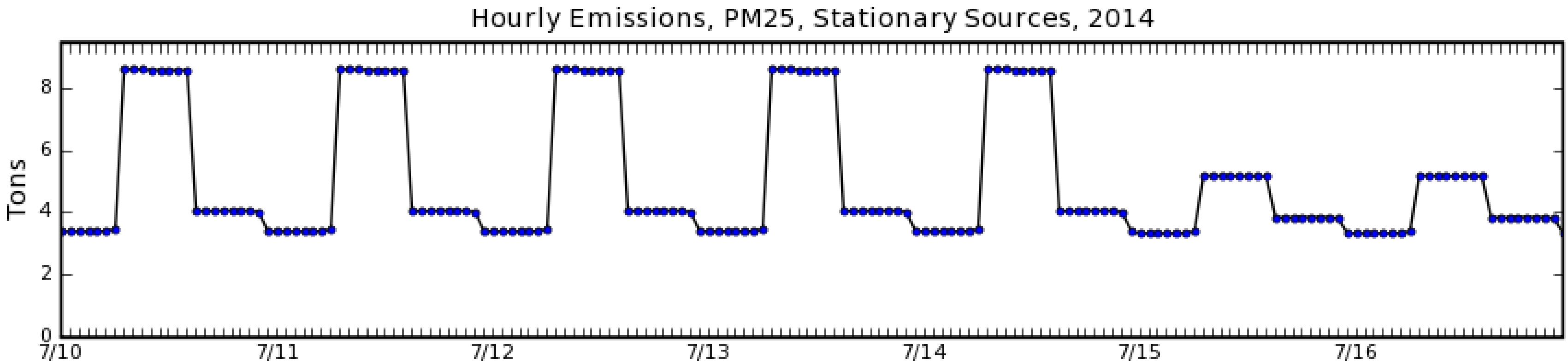


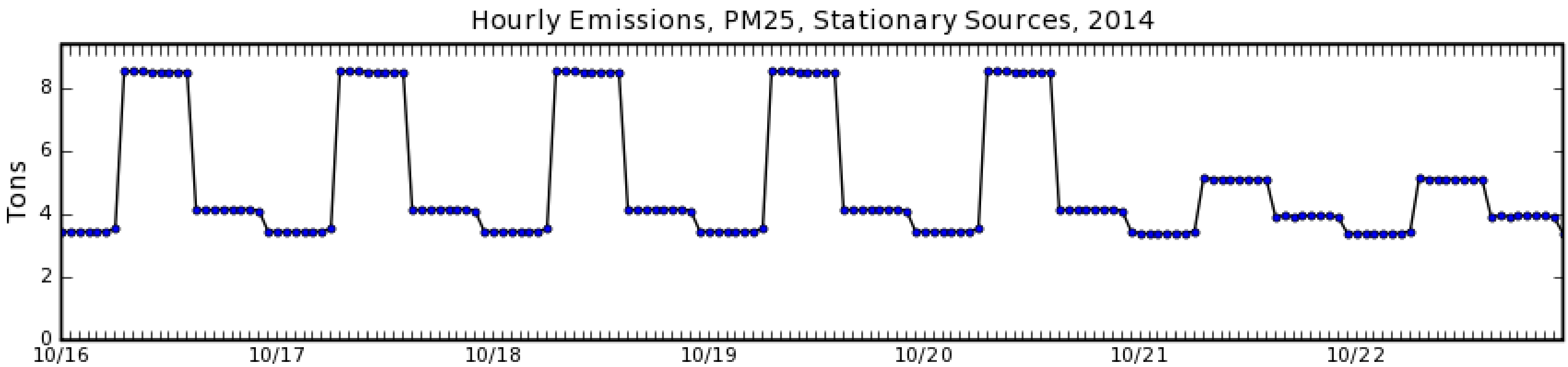

Hourly Emissions, PM25, 2014

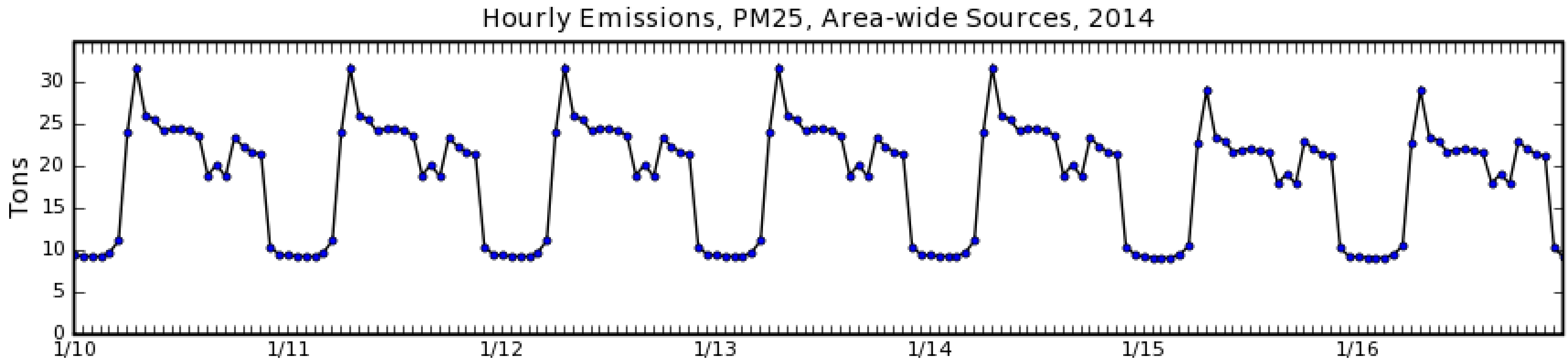



Hourly Emissions, PM25, Stationary Sources, 2014
Tons
0
2
4
6
8
1/10
1/11
1/12
1/13
1/14
1/15
1/16

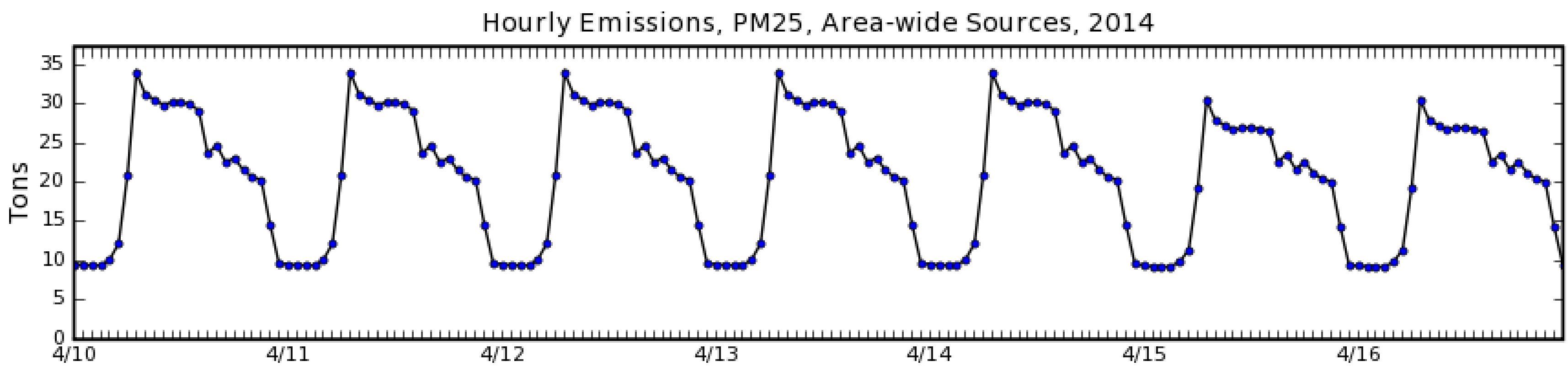

Hourly Emissions, PM25, Stationary Sources, 2014
Tons
0
2
4
6
8
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Stationary Sources, 2014
Tons
0
2
4
6
8
7/10
7/11
7/12
7/13
7/14
7/15
7/16

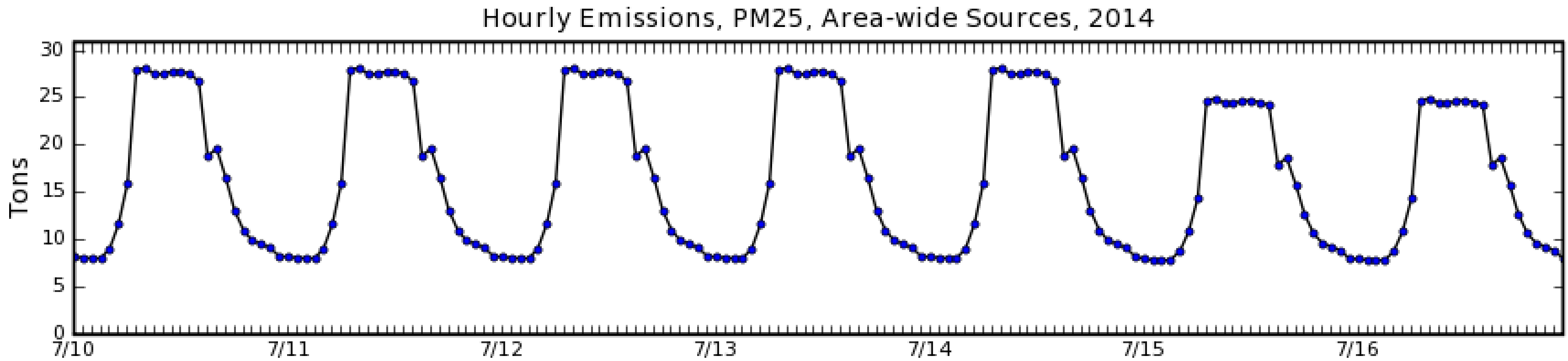

Hourly Emissions, PM25, Stationary Sources, 2014
Tons
0
2
4
6
8
10/16
10/17
10/18
10/19
10/20
10/21
10/22

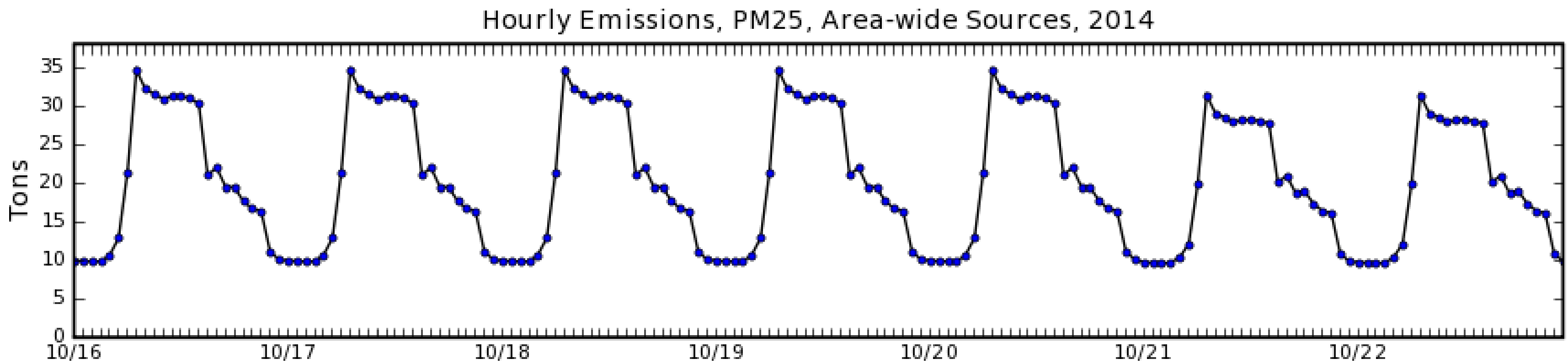


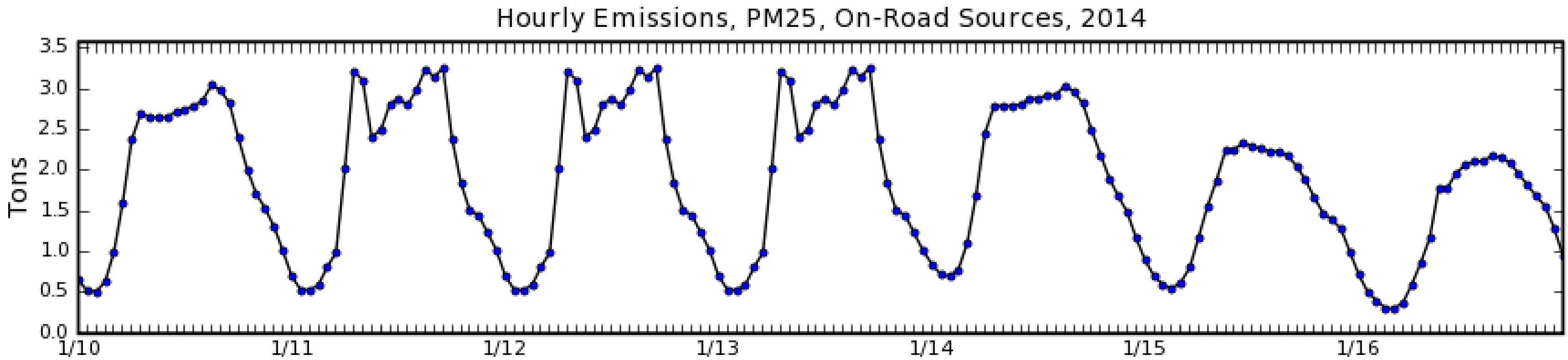
Hourly Emissions, PM25, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
1/10
1/11
1/12
1/13
1/14
1/15
1/16

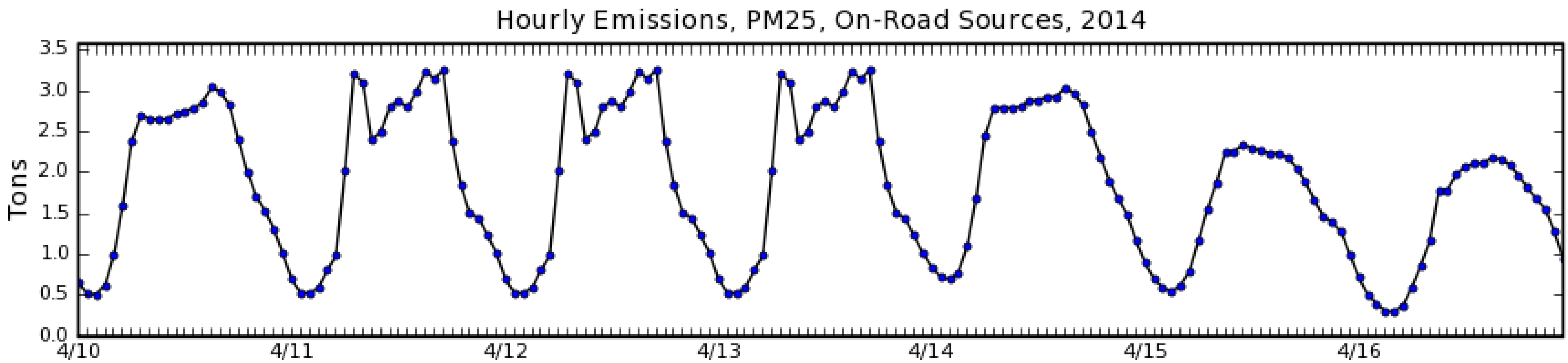
Hourly Emissions, PM25, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
35
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
7/10
7/11
7/12
7/13
7/14
7/15
7/16

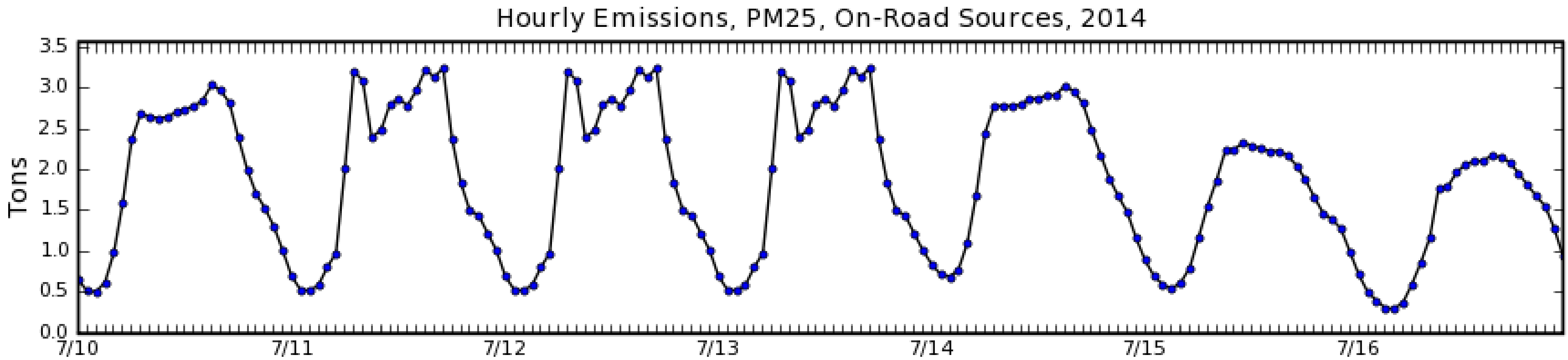

Hourly Emissions, PM25, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
35
10/16
10/17
10/18
10/19
10/20
10/21
10/22

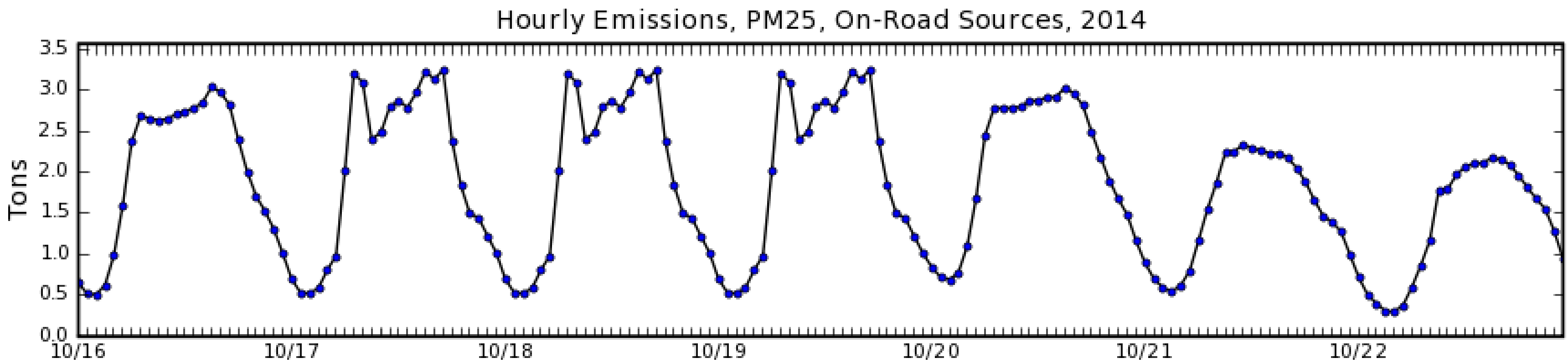


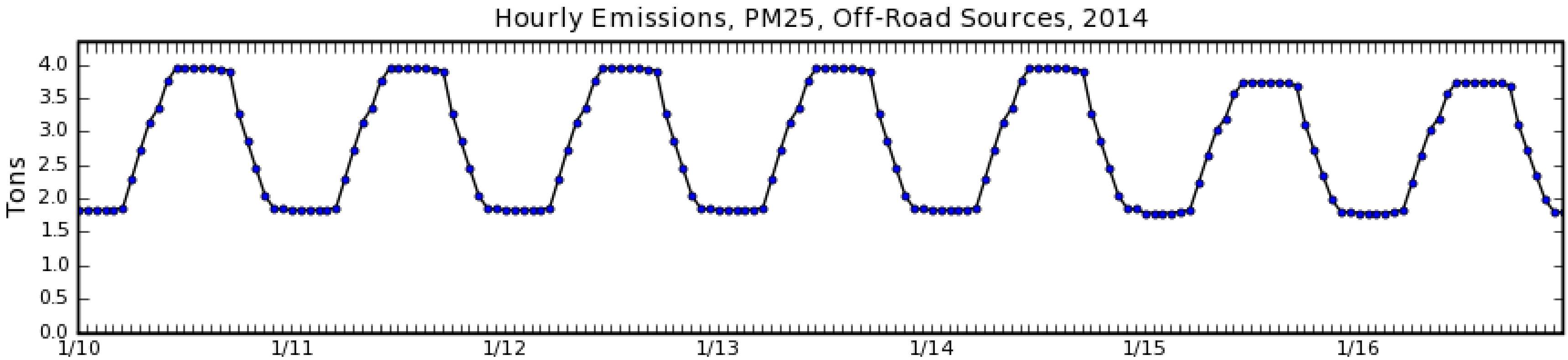
Hourly Emissions, PM25, On-Road Sources, 2014
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

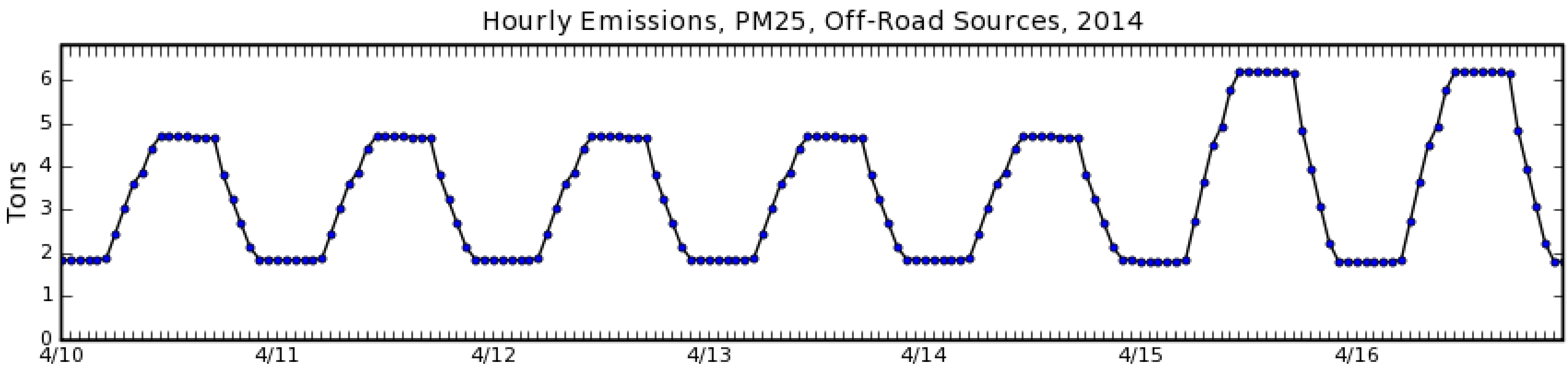



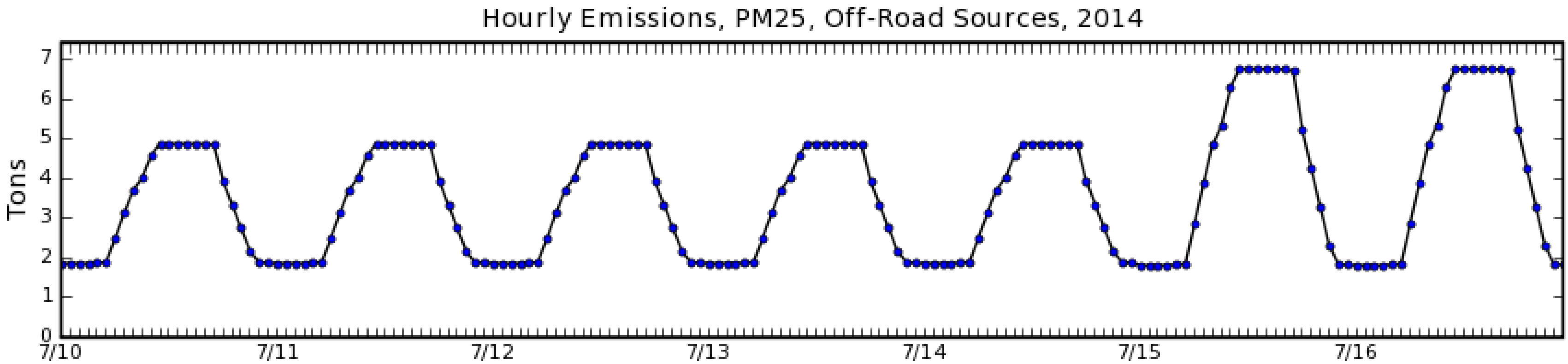
Hourly Emissions, PM25, On-Road Sources, 2014
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

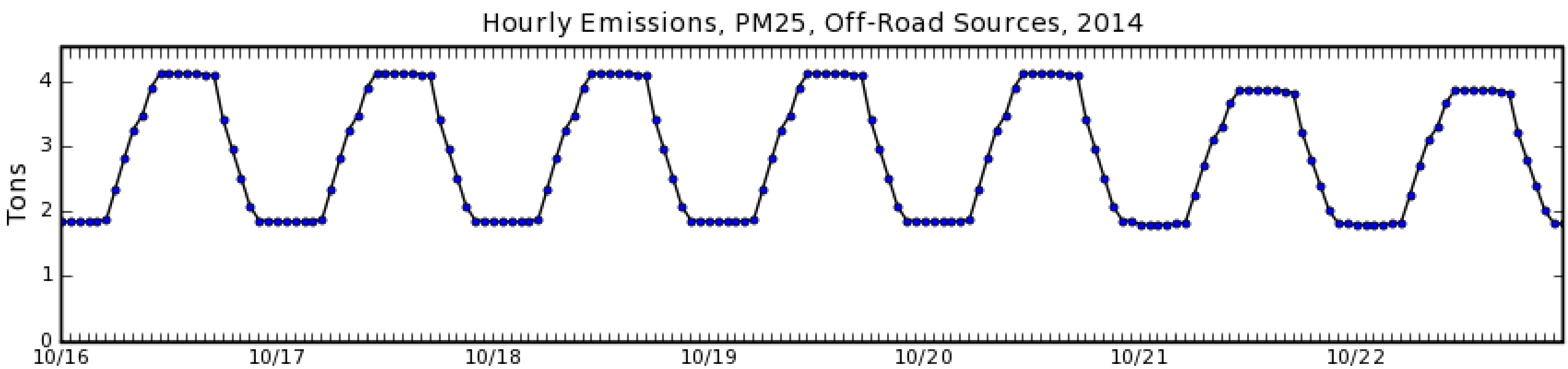

Hourly Emissions, PM25, On-Road Sources, 2014
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

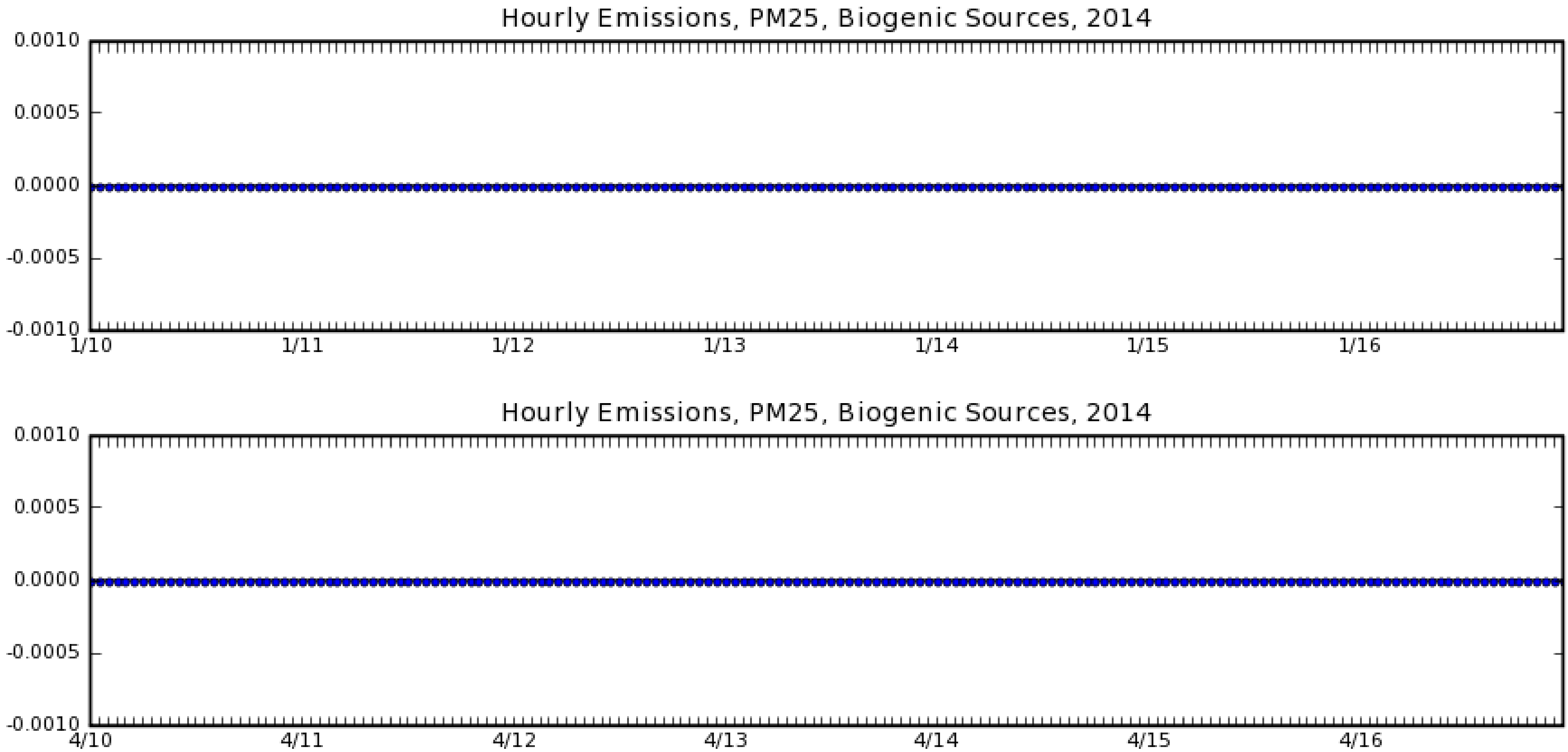

Hourly Emissions, PM25, On-Road Sources, 2014
Tons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22

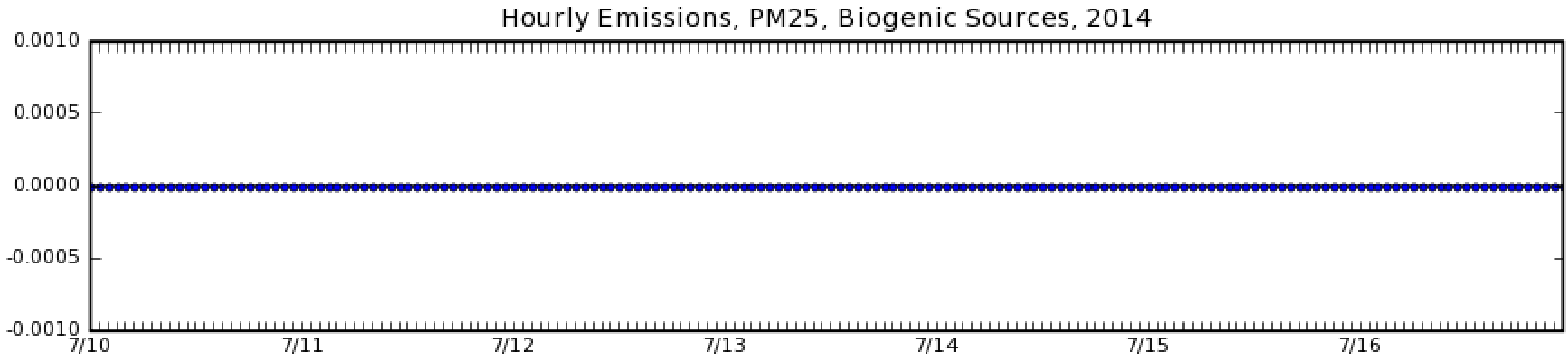

Hourly Emissions, PM25, Off-Road Sources, 2014
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, PM25, Off-Road Sources, 2014
Tons
6
5
4
3
2
1
0
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Off-Road Sources, 2014
Tons
0
1
2
3
4
5
6
7
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, PM25, Off-Road Sources, 2014
Tons
0
1
2
3
4
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, PM25, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16
Hourly Emissions, PM25, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, PM25, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

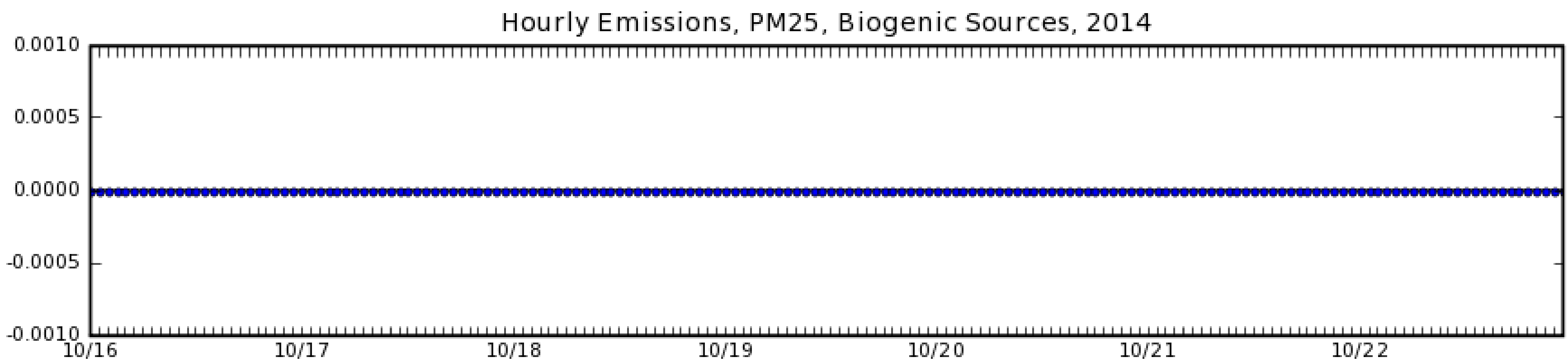
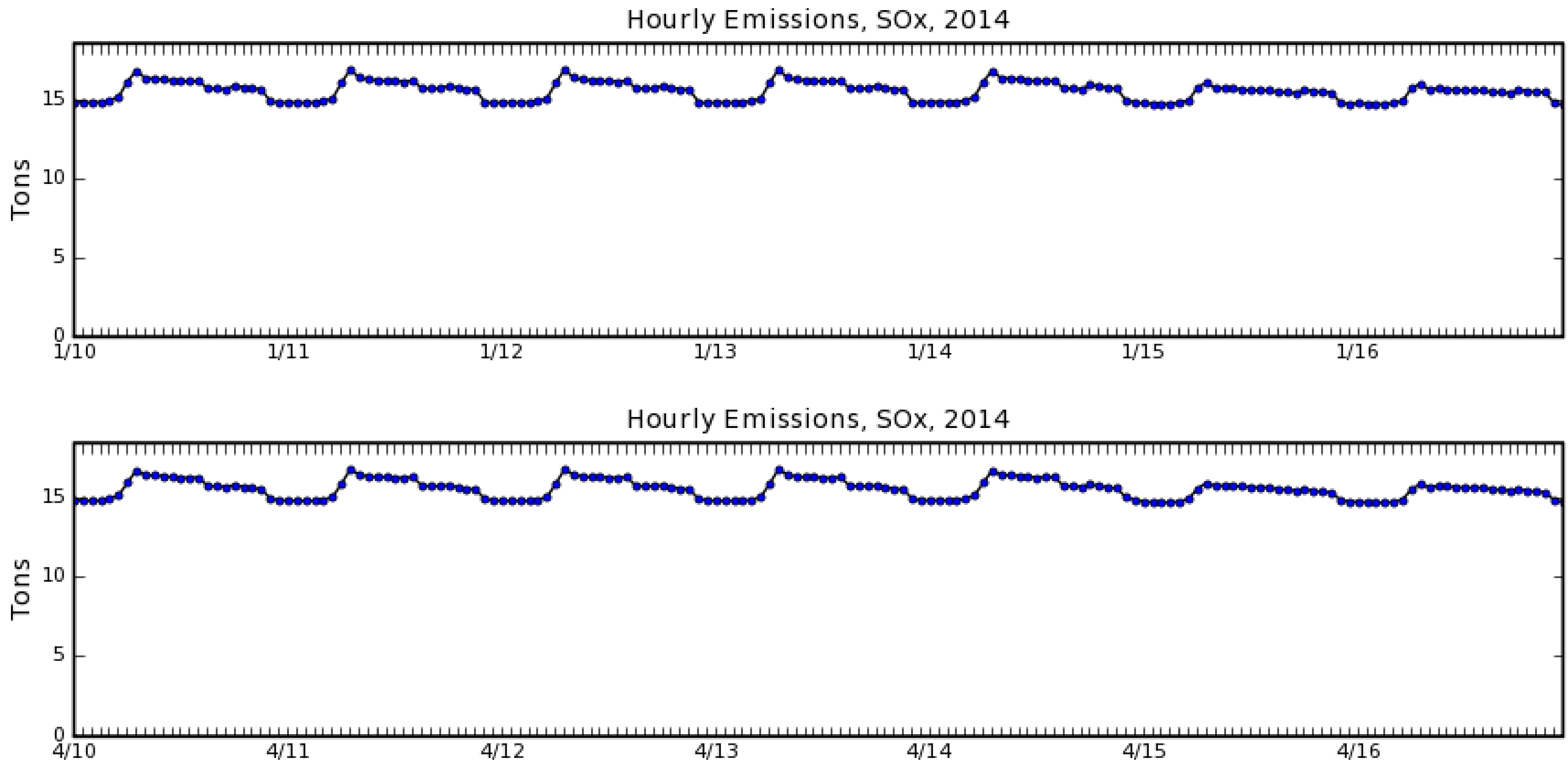
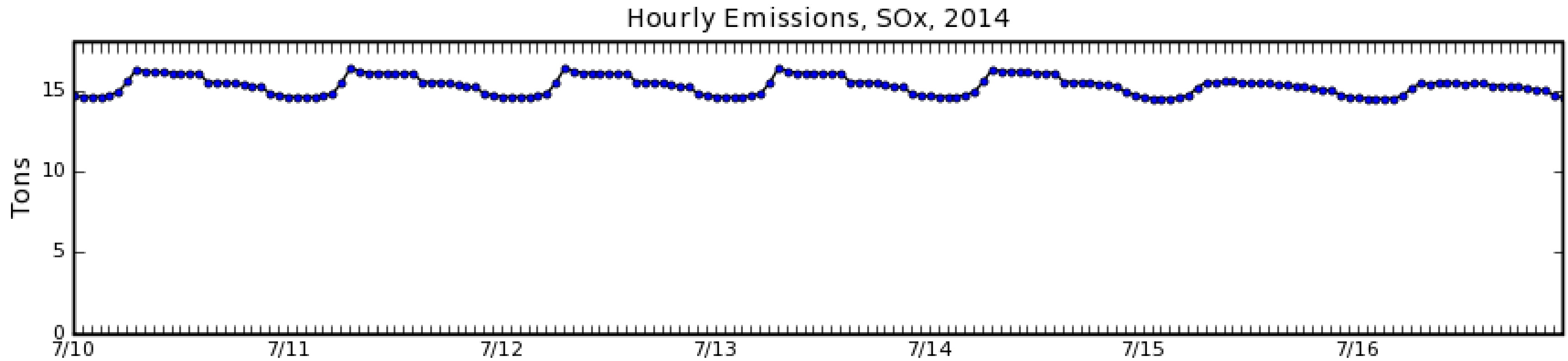
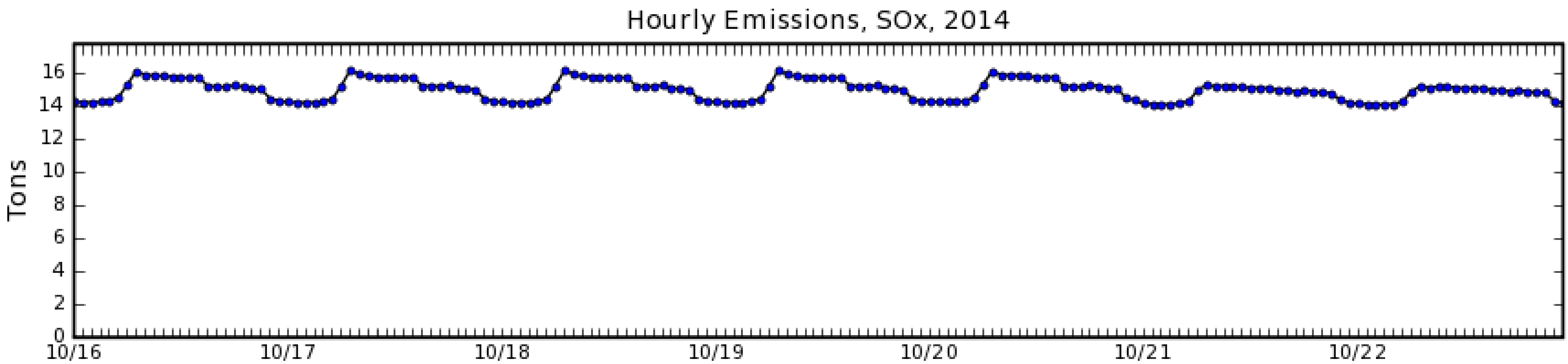
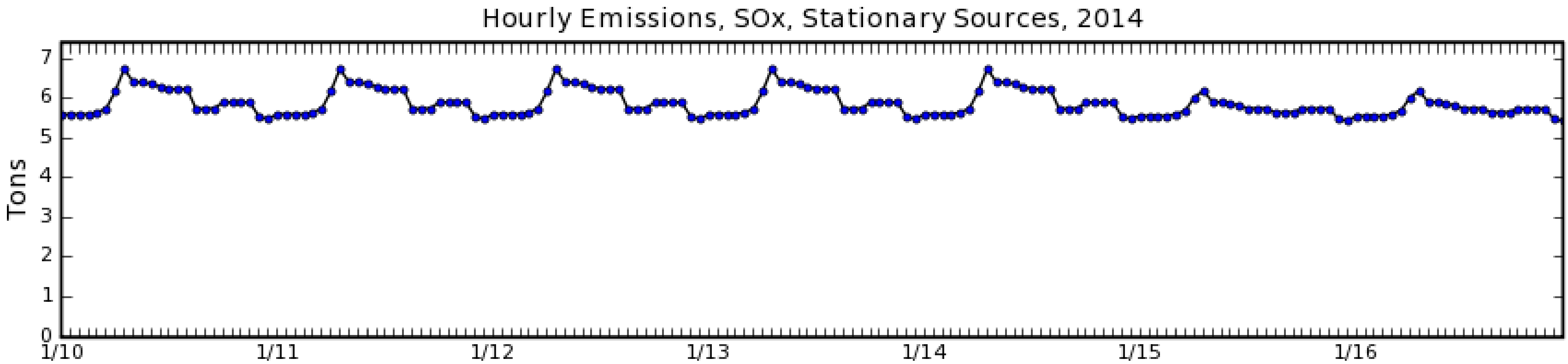

Hourly Emissions, PM25, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

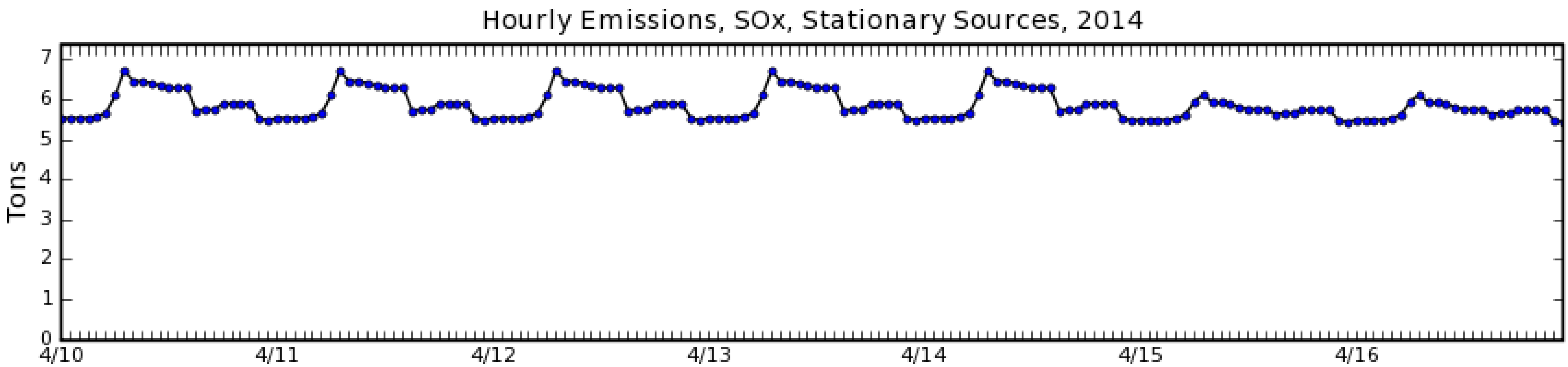
**Figure 3.71. Daily Emissions of SOx in 2014**

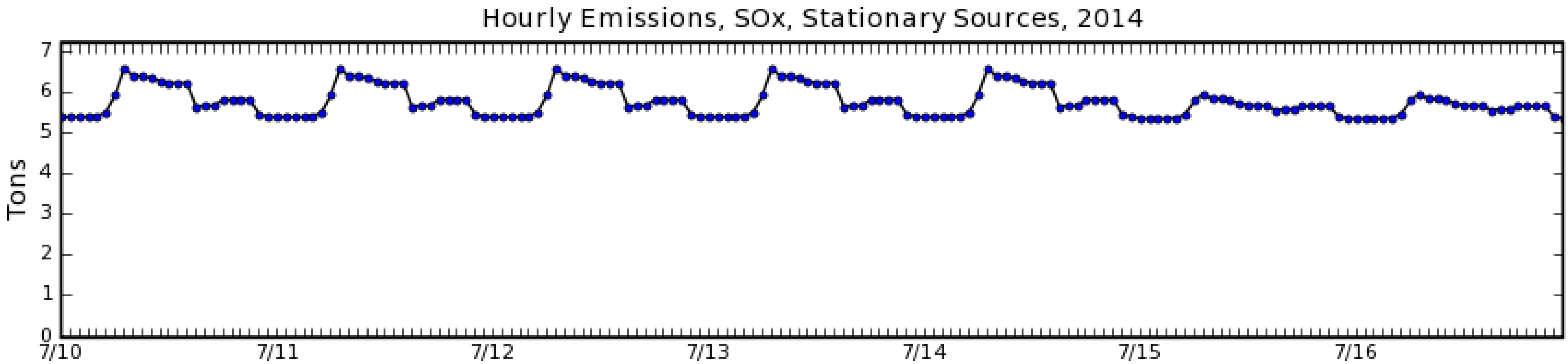


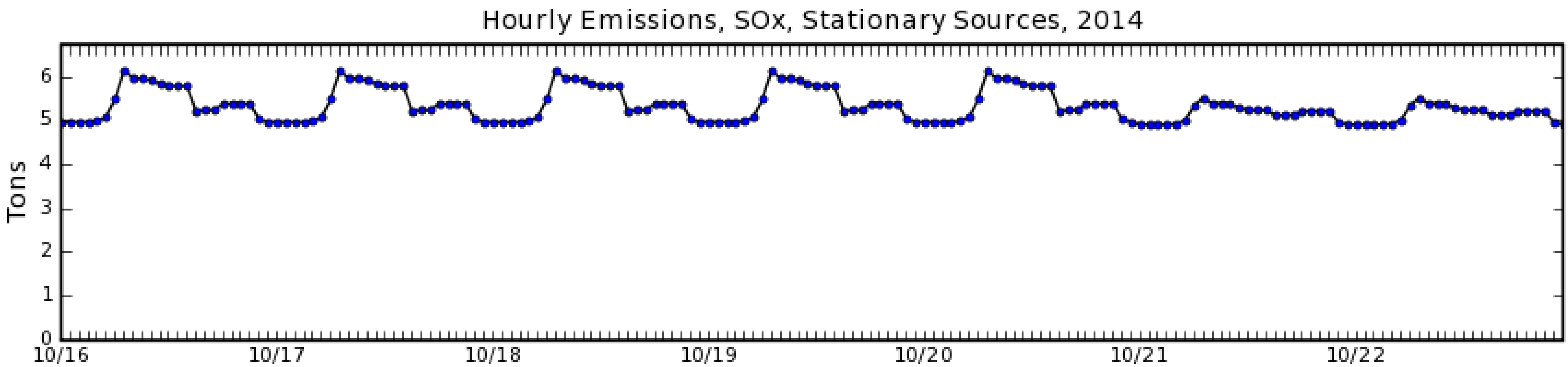

Hourly Emissions, SOx, 2014
Tons
0
5
10
15
7/10
7/11
7/12
7/13
7/14
7/15
7/16

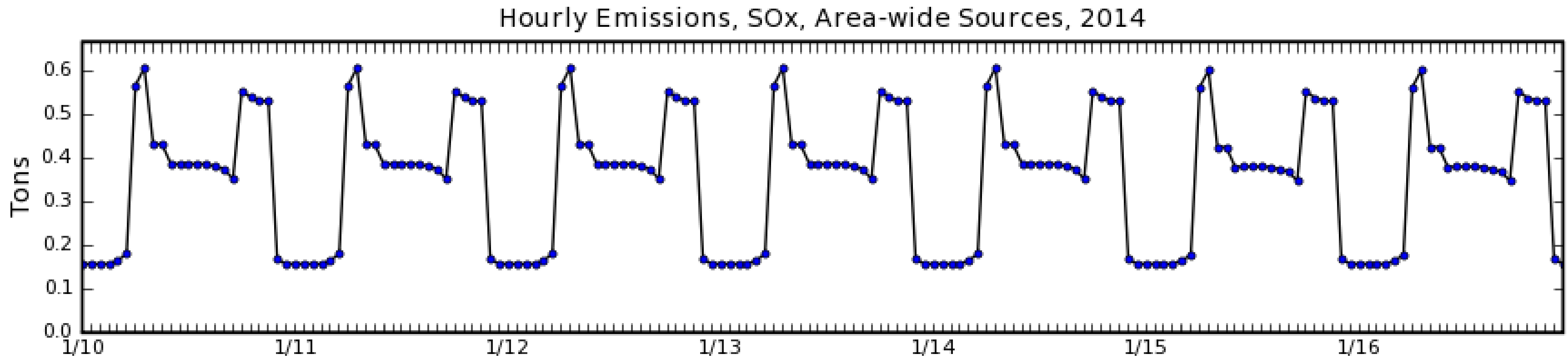

Hourly Emissions, SOx, 2014
Tons
0
2
4
6
8
10
12
14
16
10/16
10/17
10/18
10/19
10/20
10/21
10/22

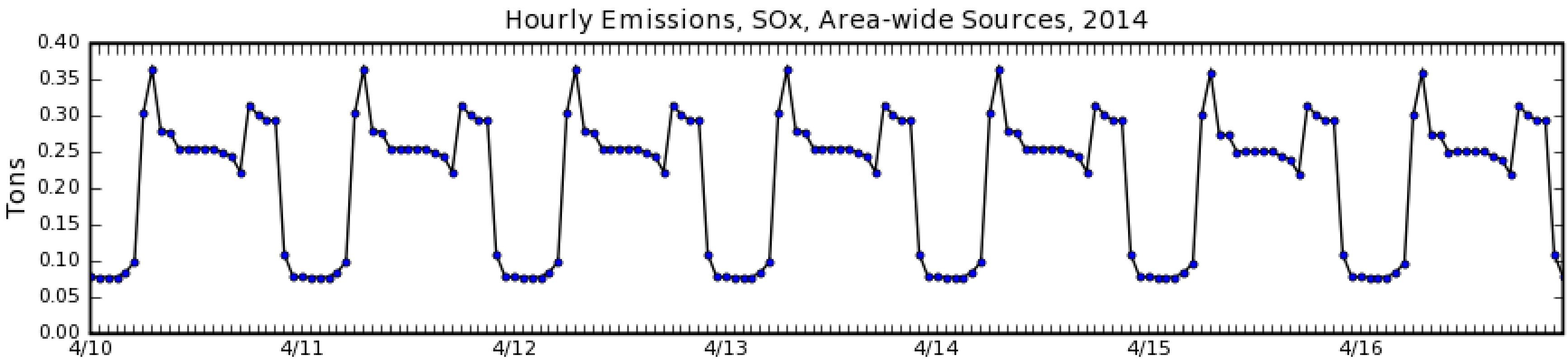

Hourly Emissions, SOx, Stationary Sources, 2014
Tons
0
1
2
3
4
5
6
7
1/10
1/11
1/12
1/13
1/14
1/15
1/16

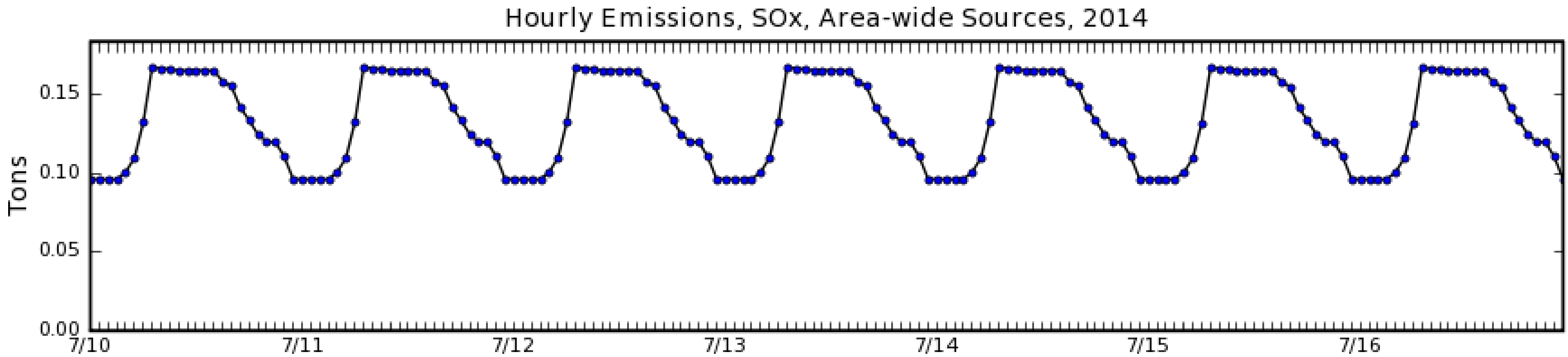

Hourly Emissions, SOx, Stationary Sources, 2014
Tons
0
1
2
3
4
5
6
7
4/10
4/11
4/12
4/13
4/14
4/15
4/16

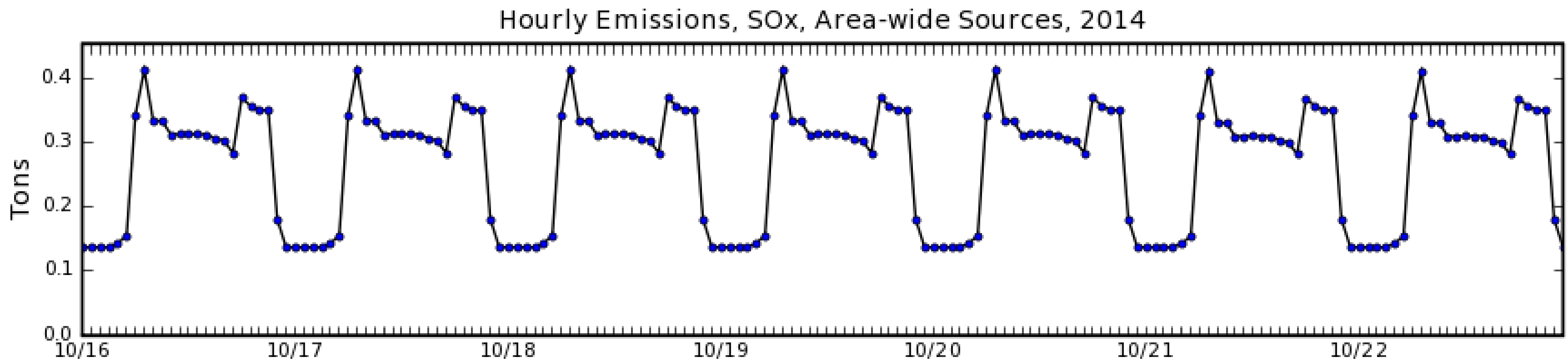

Hourly Emissions, SOx, Stationary Sources, 2014
Tons
0
1
2
3
4
5
6
7
7/10
7/11
7/12
7/13
7/14
7/15
7/16

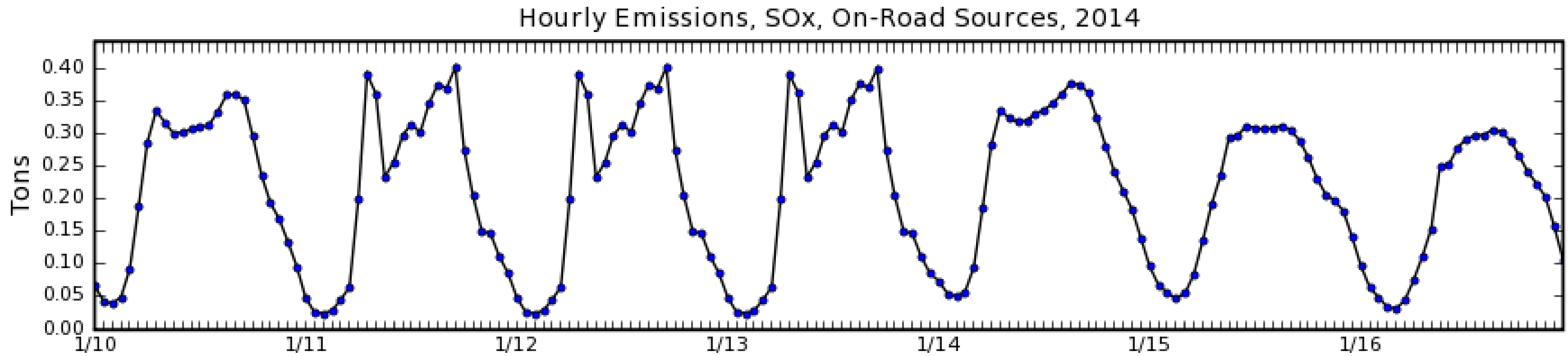

Hourly Emissions, SOx, Stationary Sources, 2014
Tons
0
1
2
3
4
5
6
10/16
10/17
10/18
10/19
10/20
10/21
10/22

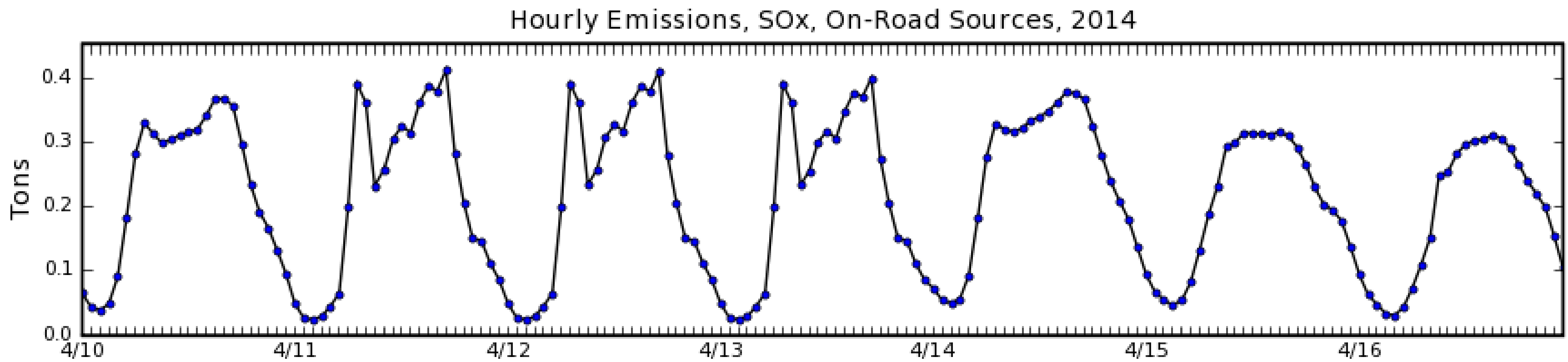

Hourly Emissions, SOx, Area-wide Sources, 2014
Tons
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1/10
1/11
1/12
1/13
1/14
1/15
1/16

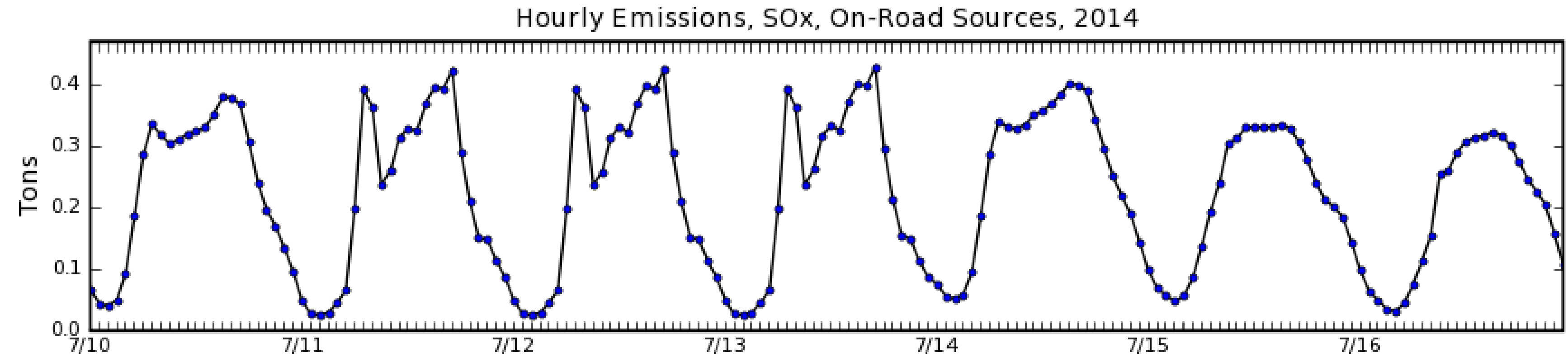

Hourly Emissions, SOx, Area-wide Sources, 2014
Tons
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.40
4/10
4/11
4/12
4/13
4/14
4/15
4/16

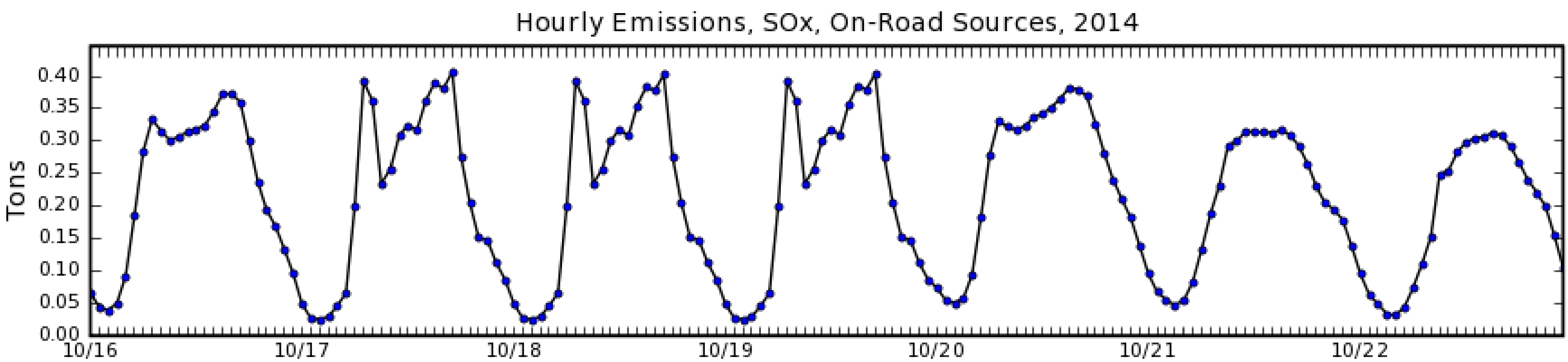

Hourly Emissions, SOx, Area-wide Sources, 2014
Tons
0.00
0.05
0.10
0.15
7/10
7/11
7/12
7/13
7/14
7/15
7/16

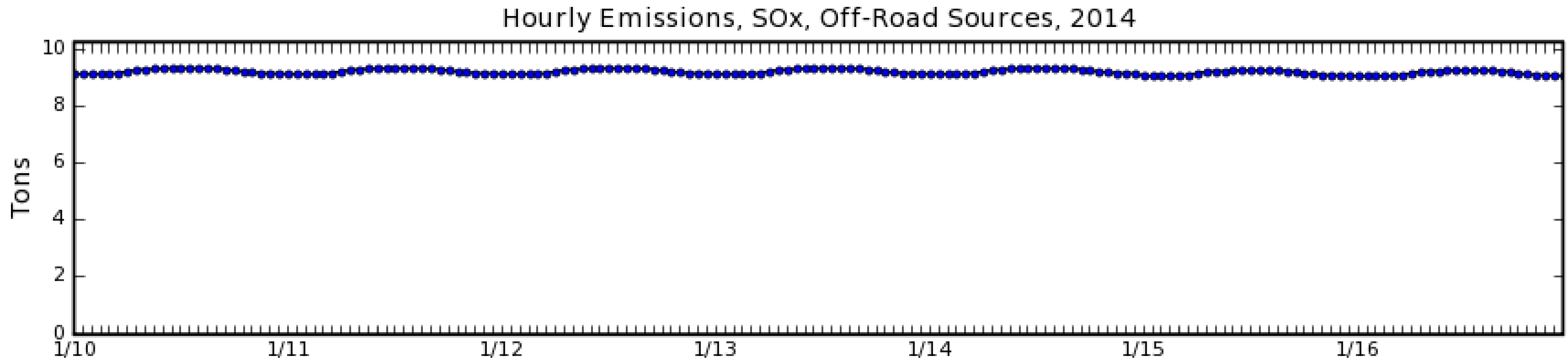

Hourly Emissions, SOx, Area-wide Sources, 2014
Tons
0.0
0.1
0.2
0.3
0.4
10/16
10/17
10/18
10/19
10/20
10/21
10/22

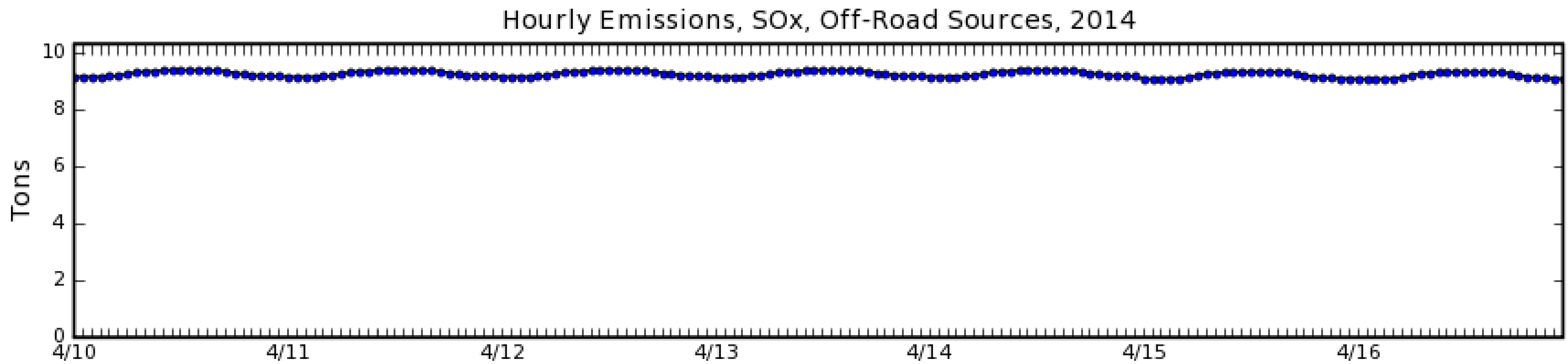

Hourly Emissions, SOx, On-Road Sources, 2014
Tons
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
1/10
1/11
1/12
1/13
1/14
1/15
1/16

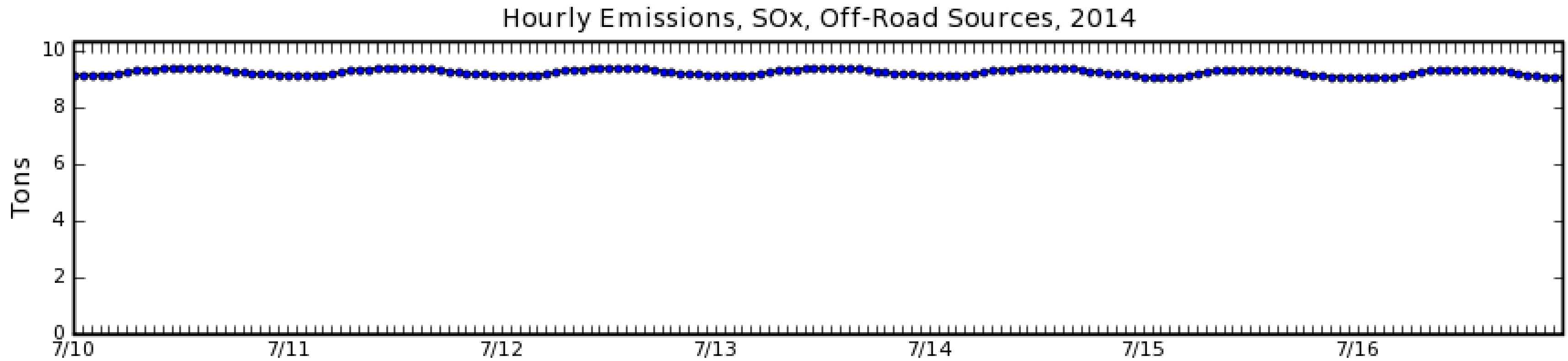

Hourly Emissions, SOx, On-Road Sources, 2014
Tons
0.4
0.3
0.2
0.1
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

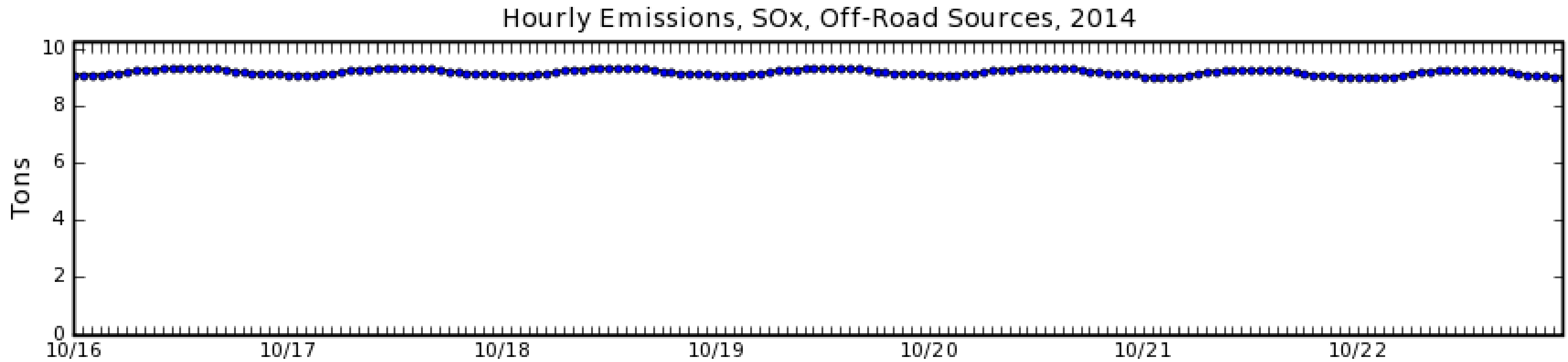

Hourly Emissions, SOx, On-Road Sources, 2014
Tons
0.0
0.1
0.2
0.3
0.4
7/10
7/11
7/12
7/13
7/14
7/15
7/16

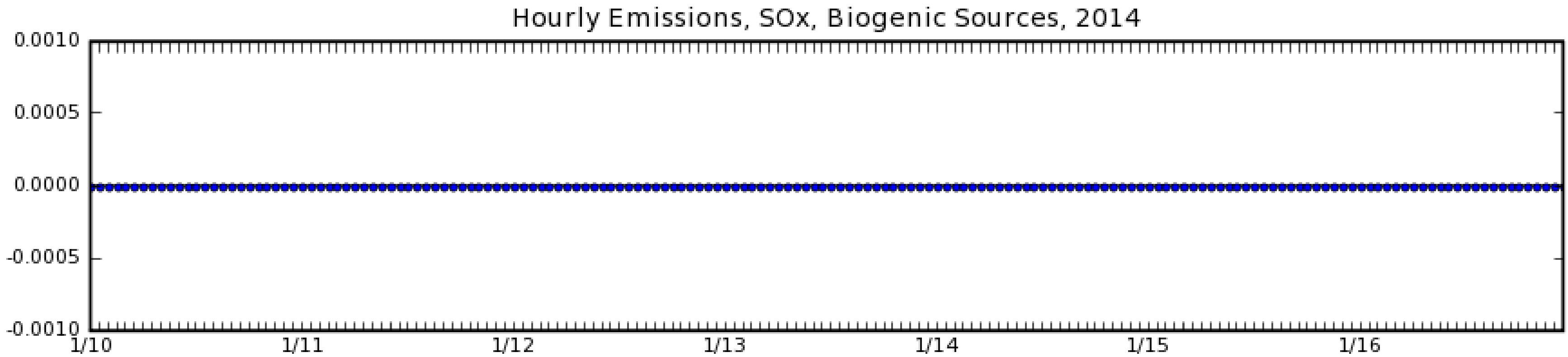

Hourly Emissions, SOx, On-Road Sources, 2014
Tons
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.40
10/16
10/17
10/18
10/19
10/20
10/21
10/22

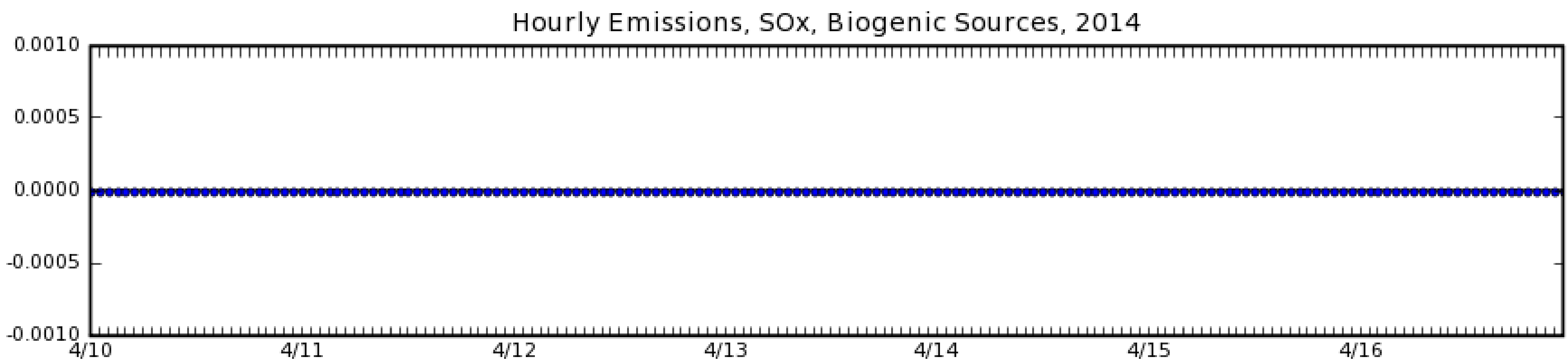

Hourly Emissions, SOx, Off-Road Sources, 2014
Tons
0
2
4
6
8
10
1/10
1/11
1/12
1/13
1/14
1/15
1/16

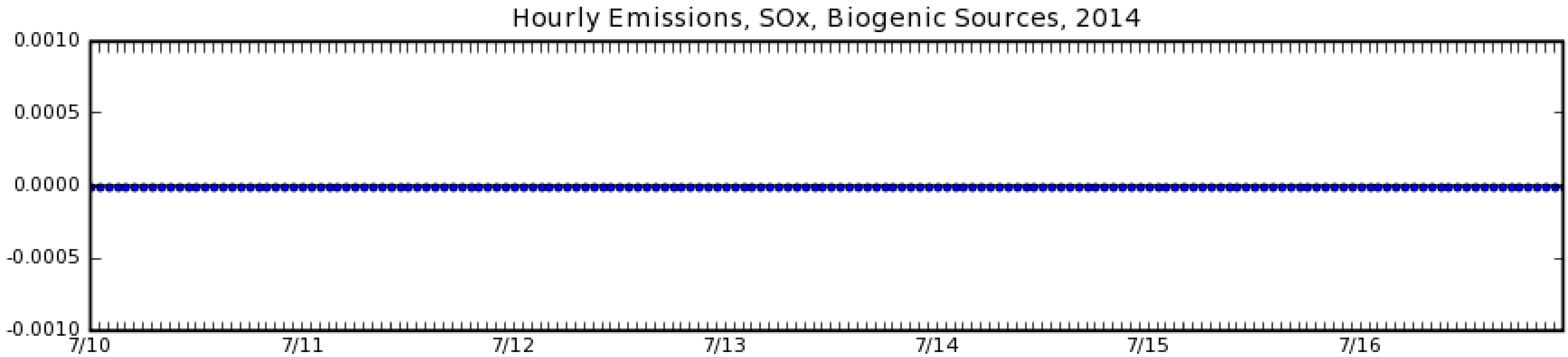

Hourly Emissions, SOx, Off-Road Sources, 2014
Tons
0
2
4
6
8
10
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, SOx, Off-Road Sources, 2014
Tons
0
2
4
6
8
10
7/10
7/11
7/12
7/13
7/14
7/15
7/16


Hourly Emissions, SOx, Off-Road Sources, 2014
Tons
0
2
4
6
8
10
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, SOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, SOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, SOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

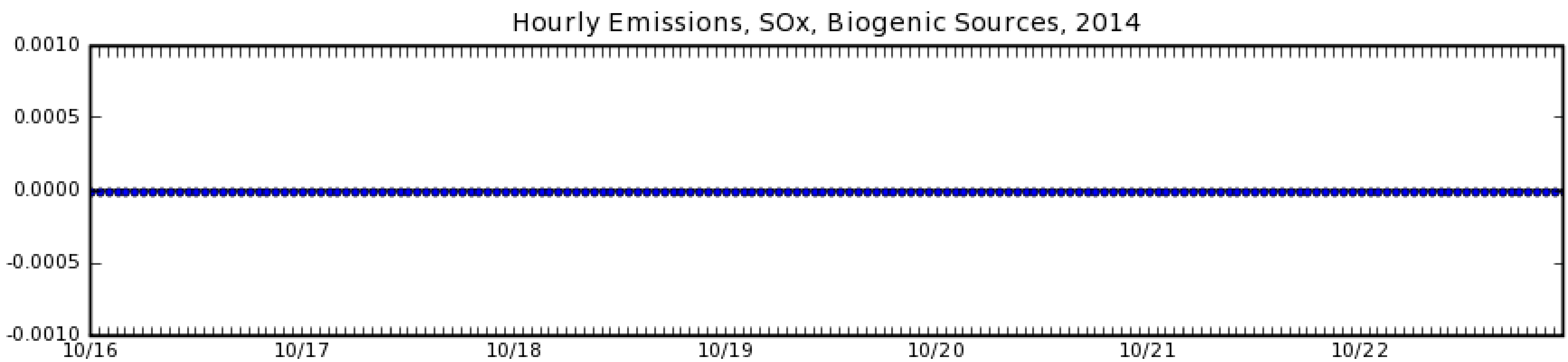
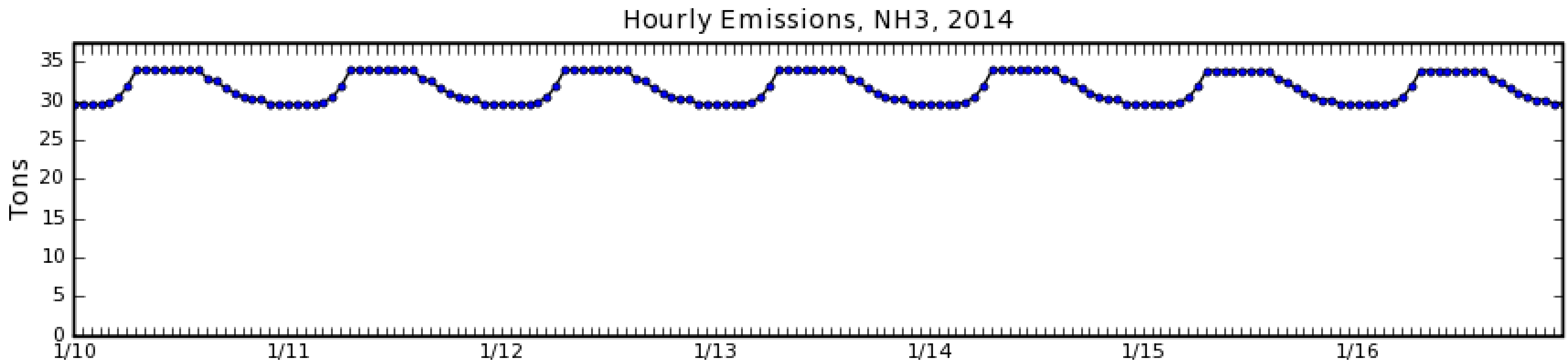
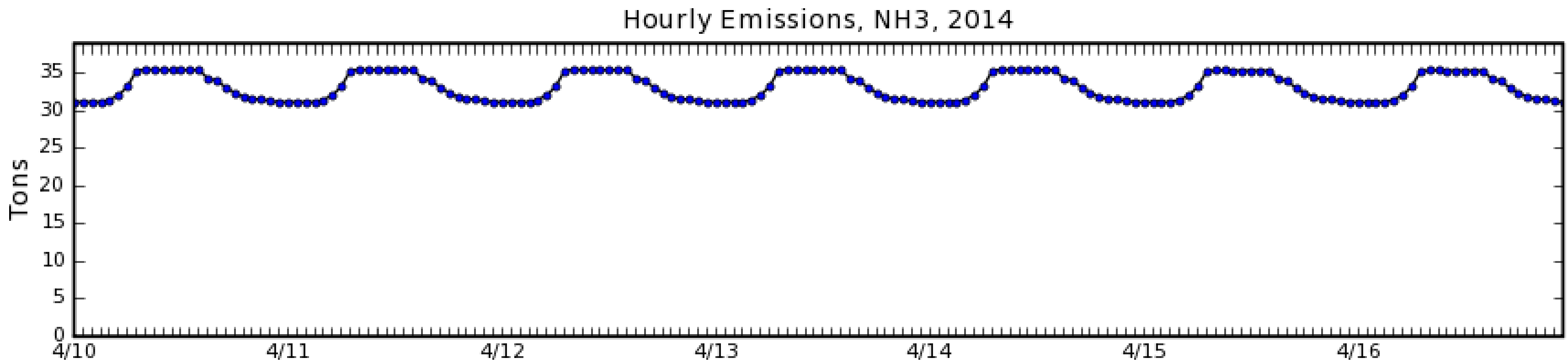
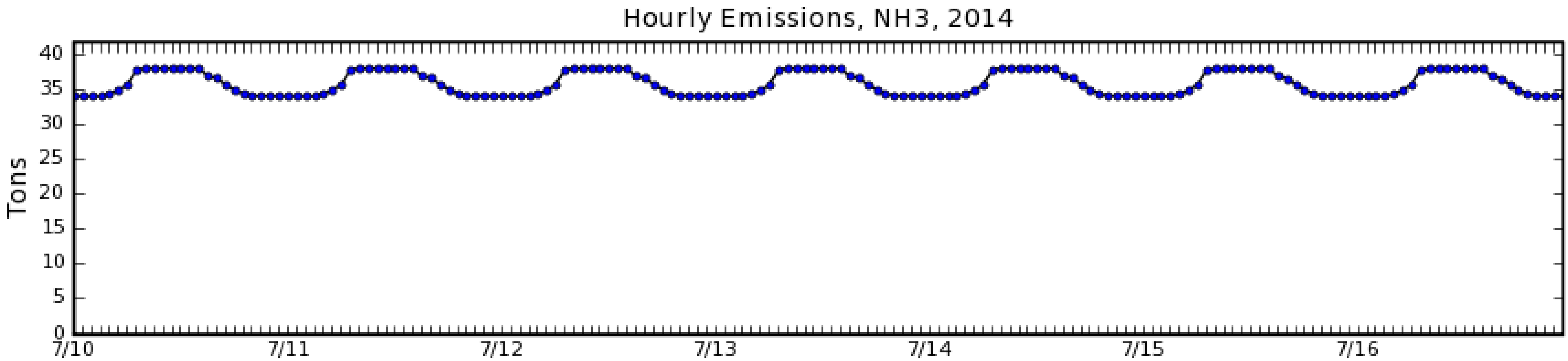

Hourly Emissions, SOx, Biogenic Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22

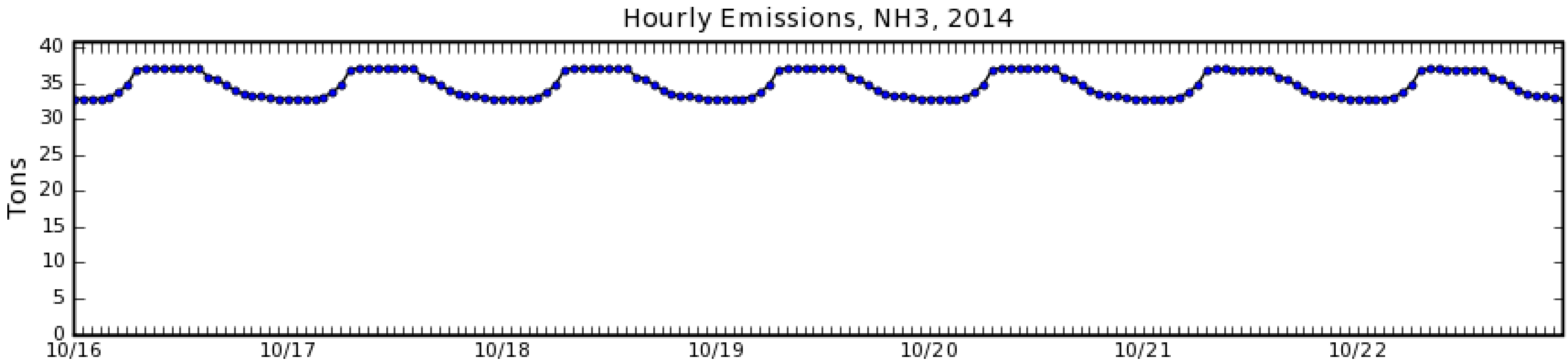
**Figure 3.72. Daily Emissions of NH3 in 2014**



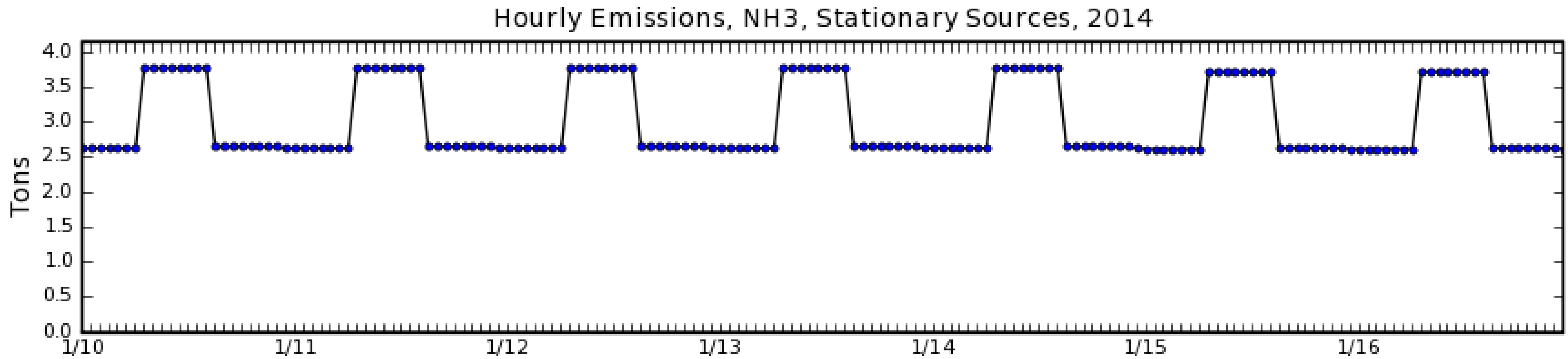



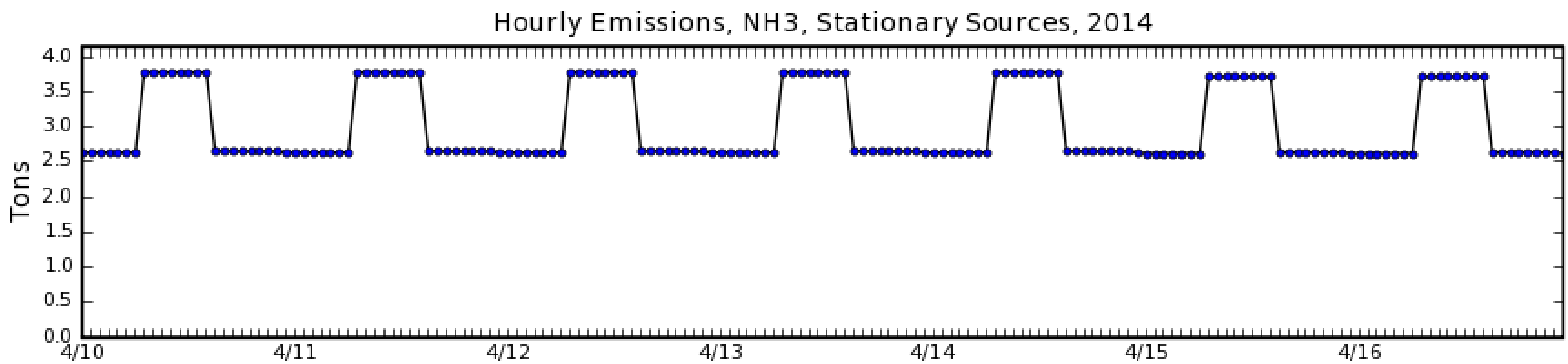


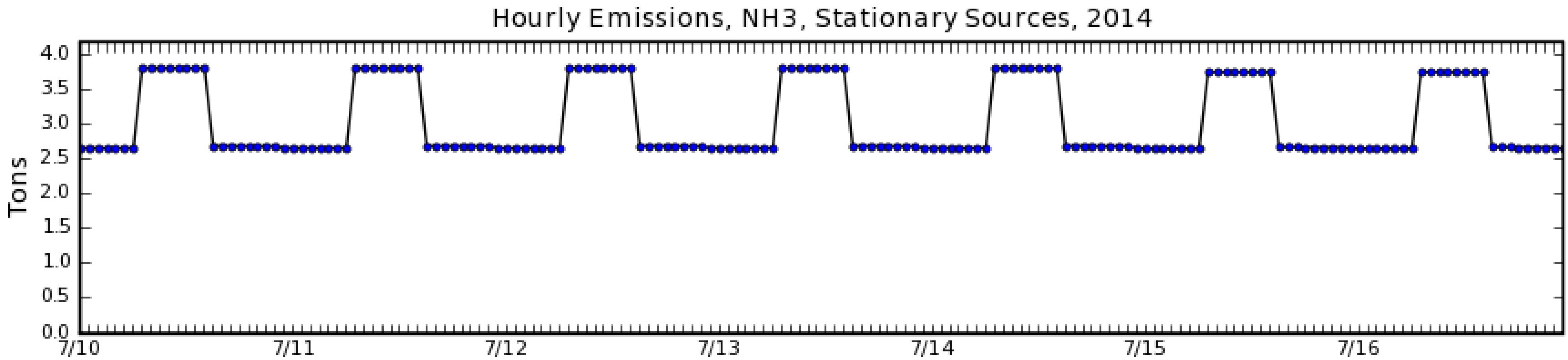
Hourly Emissions, NH3, 2014
Tons
0
5
10
15
20
25
30
35
40
7/10
7/11
7/12
7/13
7/14
7/15
7/16

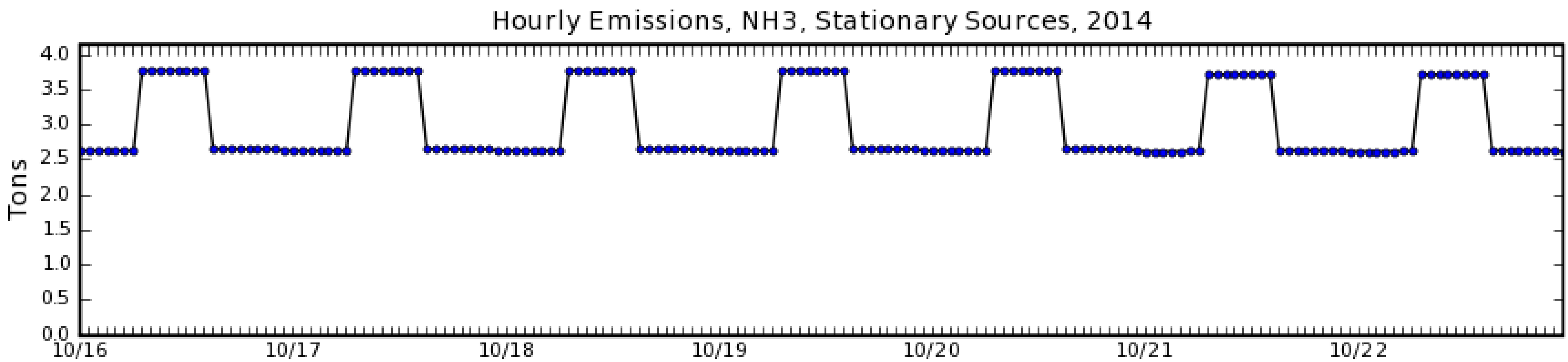



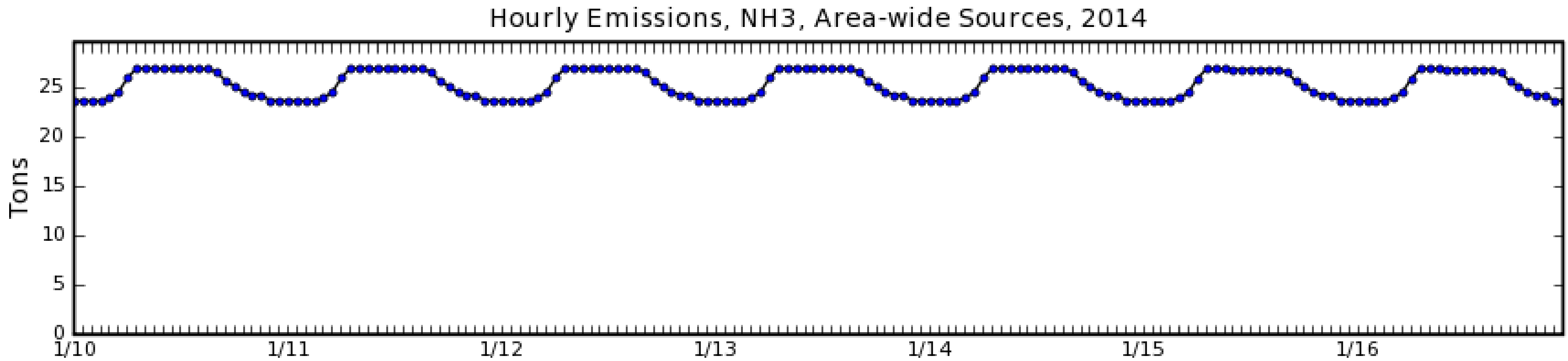
Hourly Emissions, NH3, 2014
Tons
0
5
10
15
20
25
30
35
40
10/16
10/17
10/18
10/19
10/20
10/21
10/22

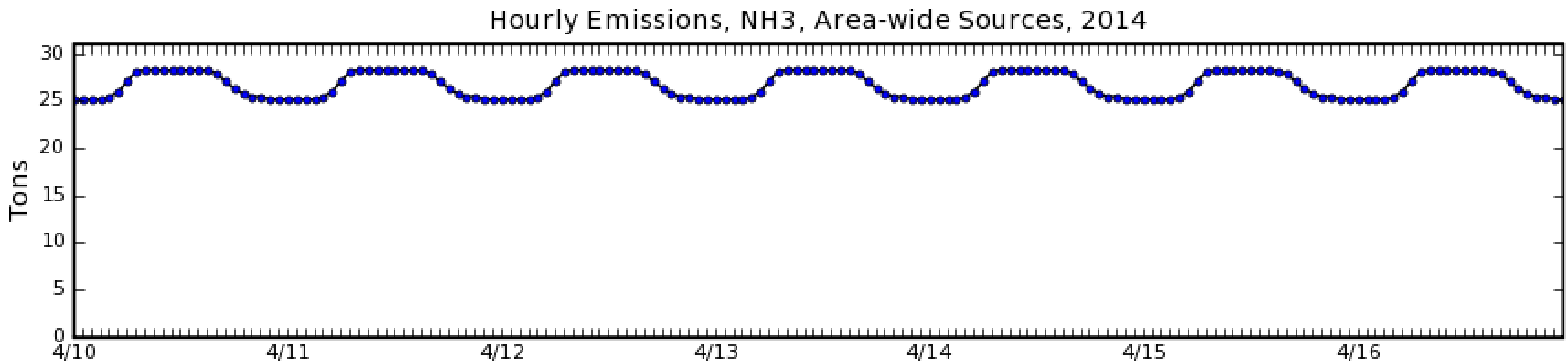

Hourly Emissions, NH3, Stationary Sources, 2014
Tons
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

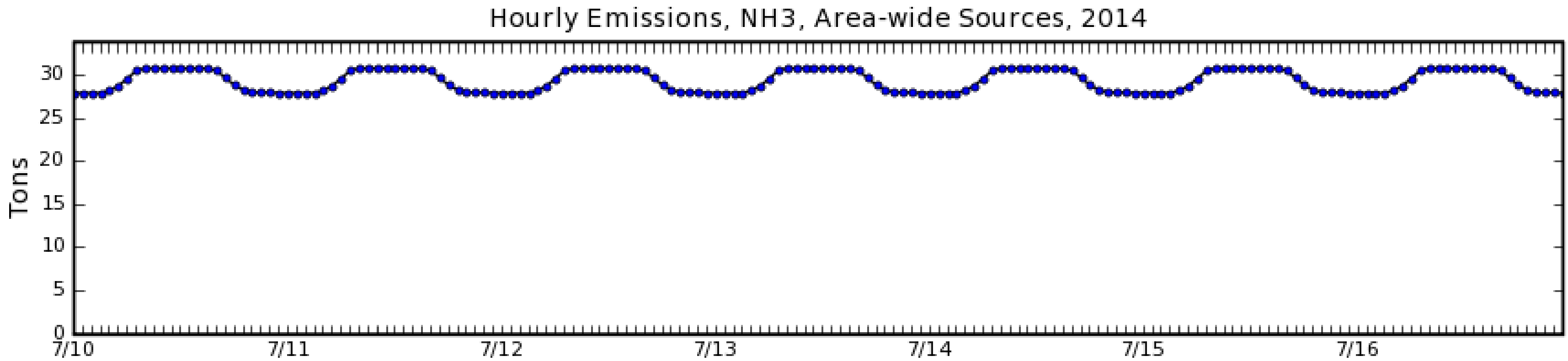

Hourly Emissions, NH3, Stationary Sources, 2014
Tons
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NH3, Stationary Sources, 2014
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

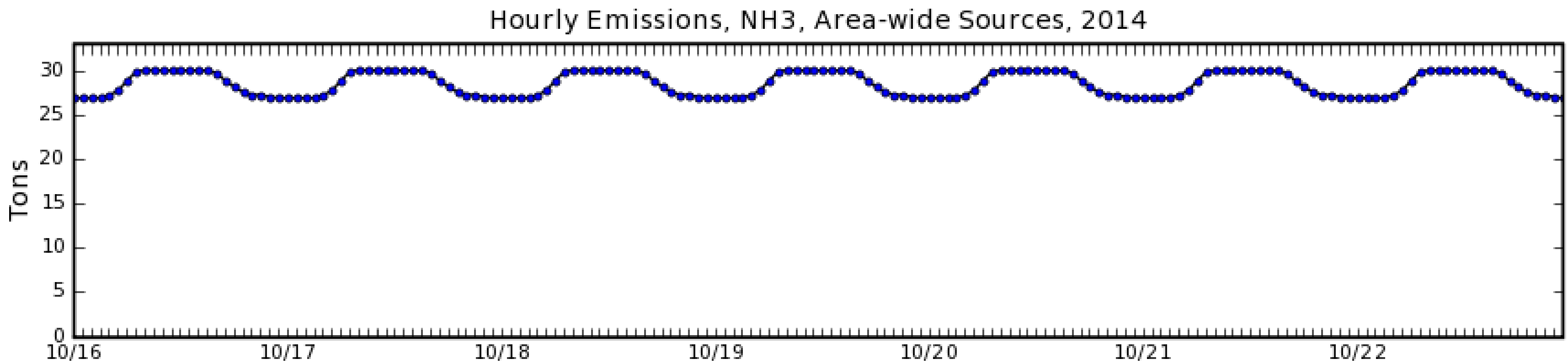

Hourly Emissions, NH3, Stationary Sources, 2014
Tons
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NH3, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
1/10
1/11
1/12
1/13
1/14
1/15
1/16

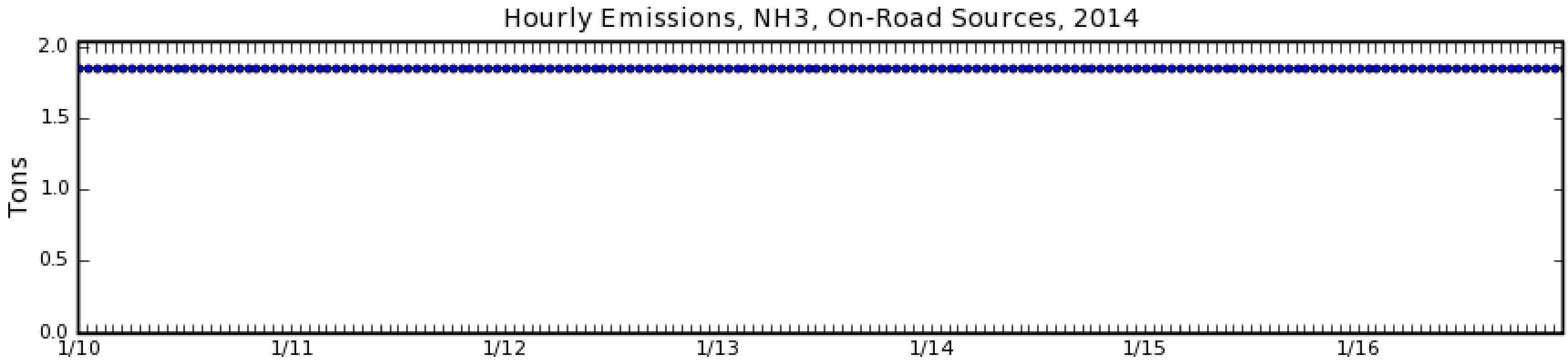

Hourly Emissions, NH3, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
4/10
4/11
4/12
4/13
4/14
4/15
4/16

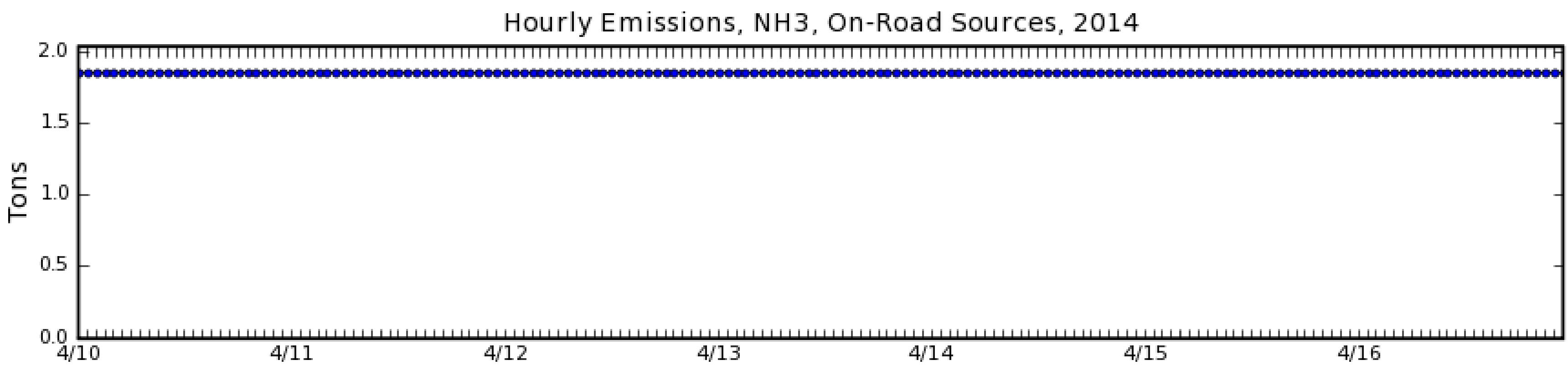


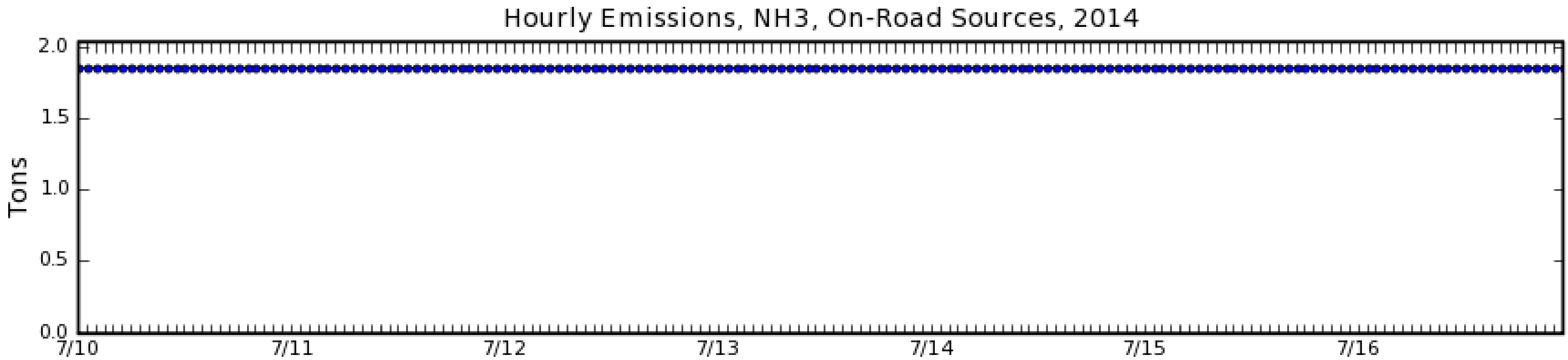
Hourly Emissions, NH3, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
7/10
7/11
7/12
7/13
7/14
7/15
7/16

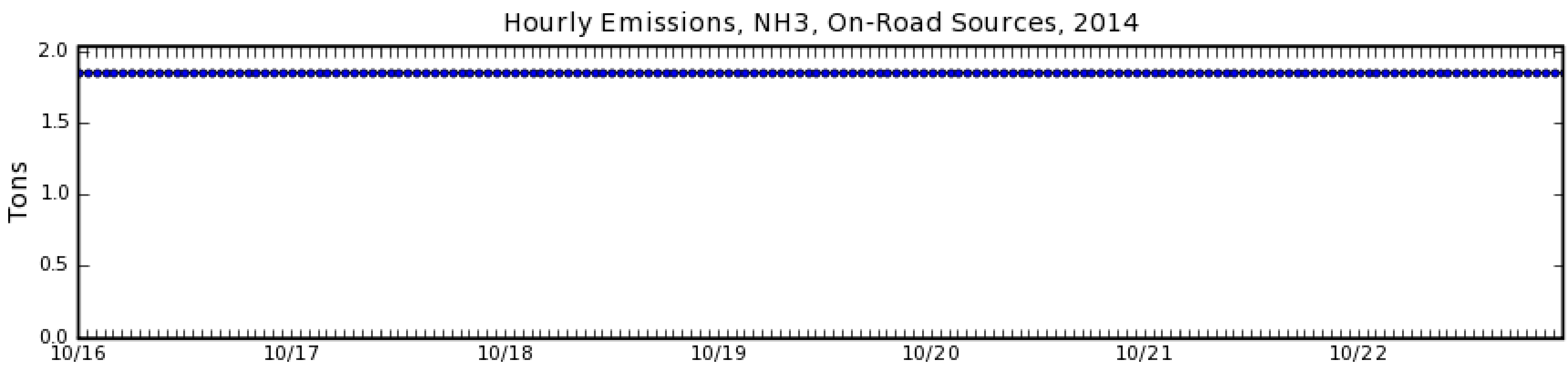



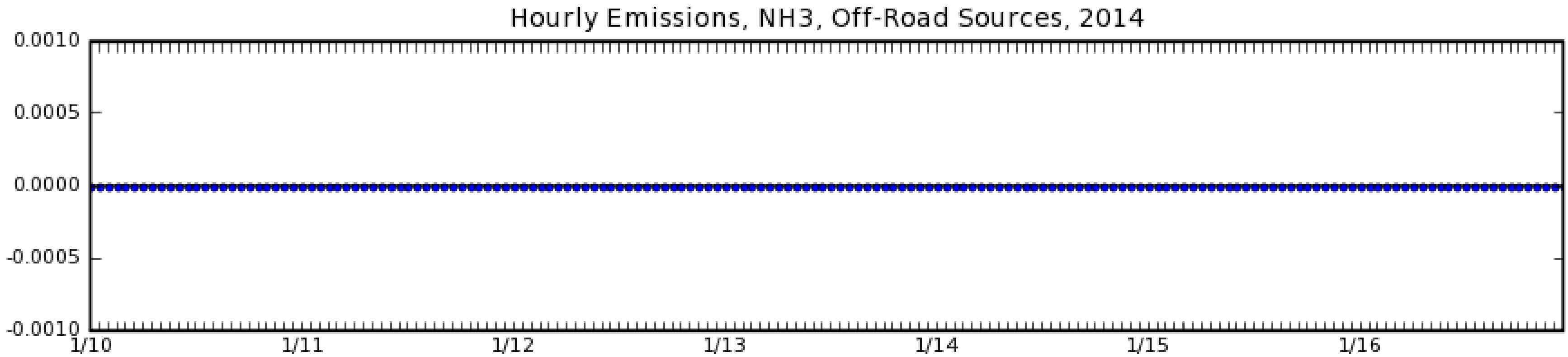
Hourly Emissions, NH3, Area-wide Sources, 2014
Tons
0
5
10
15
20
25
30
10/16
10/17
10/18
10/19
10/20
10/21
10/22

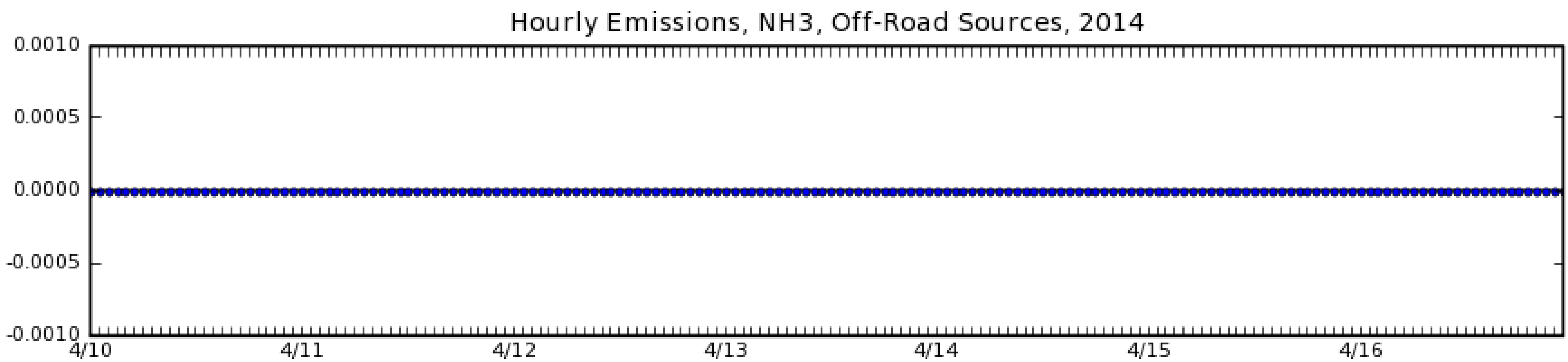

Hourly Emissions, NH3, On-Road Sources, 2014
Tons
2.0
1.5
1.0
0.5
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16

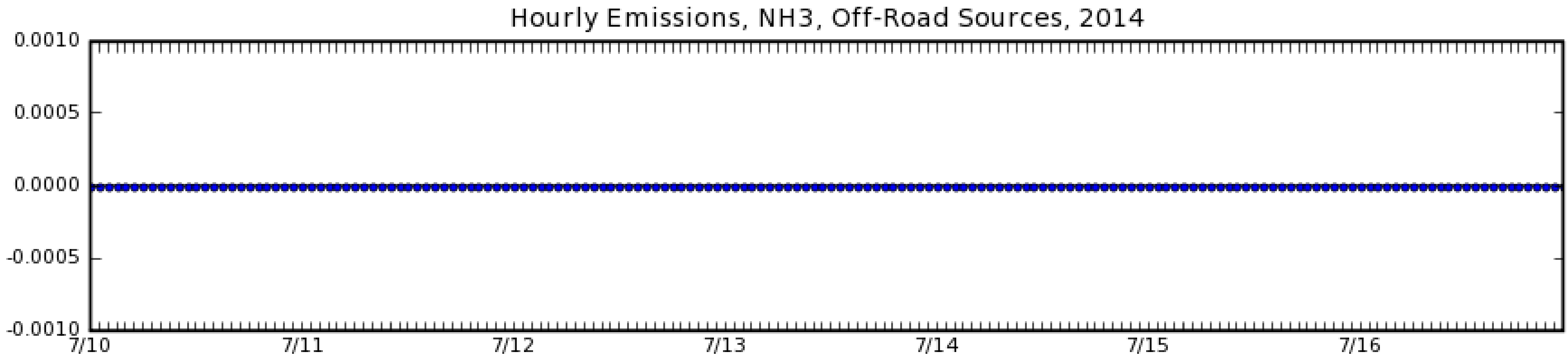

Hourly Emissions, NH3, On-Road Sources, 2014
Tons
2.0
1.5
1.0
0.5
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16


Hourly Emissions, NH3, On-Road Sources, 2014
Tons
2.0
1.5
1.0
0.5
0.0
7/10
7/11
7/12
7/13
7/14
7/15
7/16

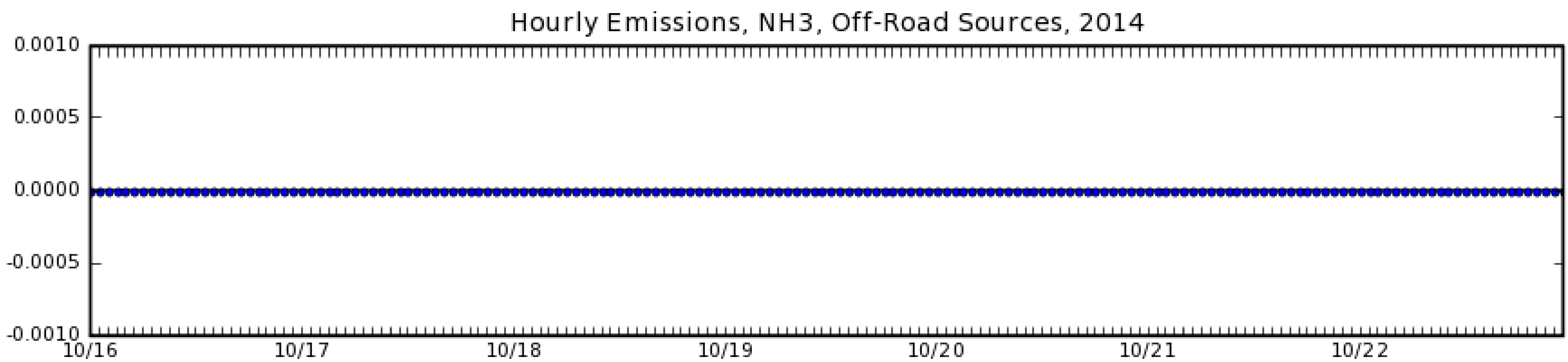

Hourly Emissions, NH3, On-Road Sources, 2014
Tons
2.0
1.5
1.0
0.5
0.0
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NH3, Off-Road Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
1/10
1/11
1/12
1/13
1/14
1/15
1/16

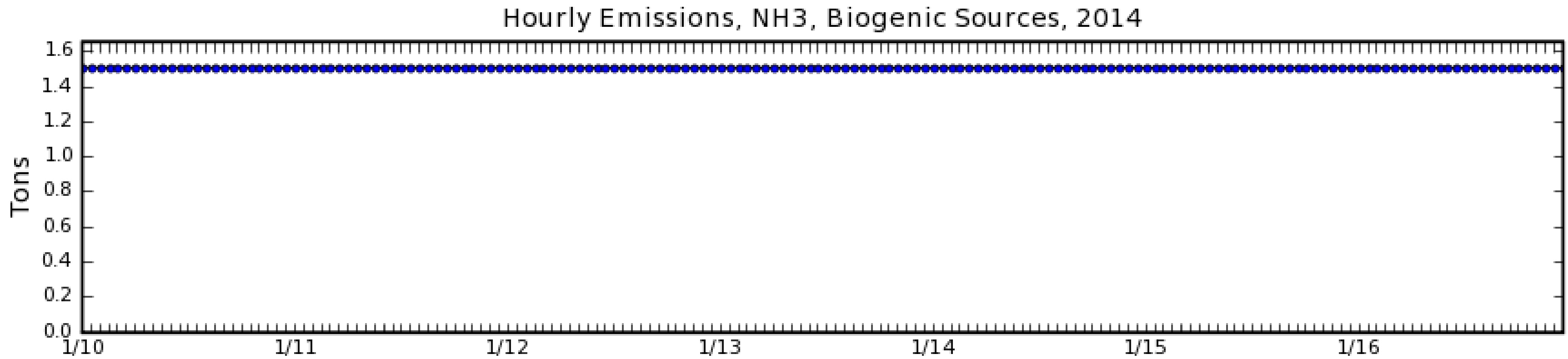

Hourly Emissions, NH3, Off-Road Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
4/10
4/11
4/12
4/13
4/14
4/15
4/16

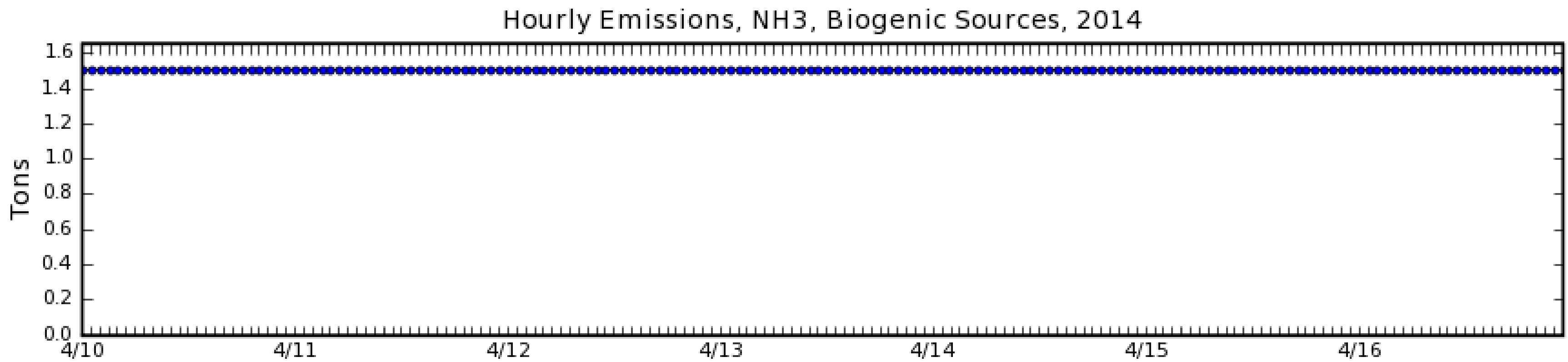


Hourly Emissions, NH3, Off-Road Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
7/10
7/11
7/12
7/13
7/14
7/15
7/16

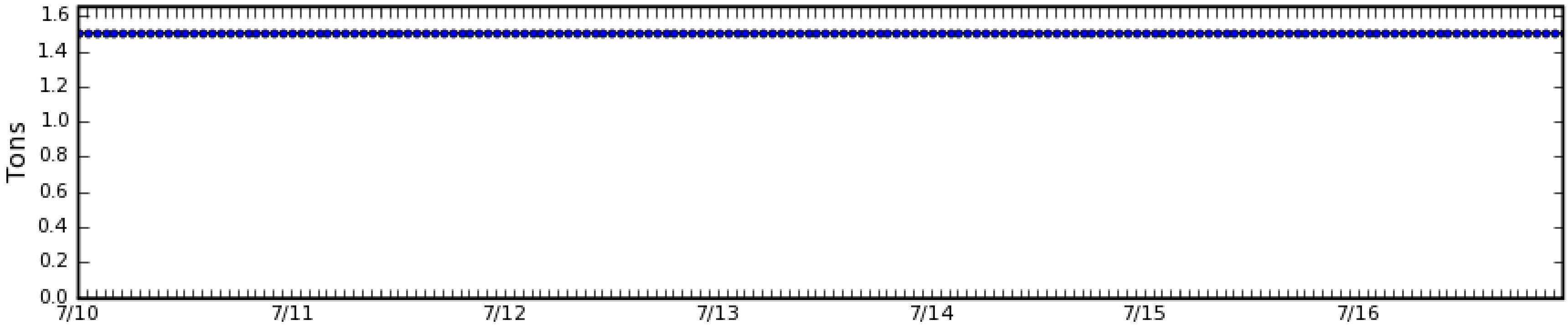



Hourly Emissions, NH3, Off-Road Sources, 2014
0.0010
0.0005
0.0000
-0.0005
-0.0010
10/16
10/17
10/18
10/19
10/20
10/21
10/22


Hourly Emissions, NH3, Biogenic Sources, 2014
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/10
1/11
1/12
1/13
1/14
1/15
1/16


Hourly Emissions, NH3, Biogenic Sources, 2014
Tons
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4/10
4/11
4/12
4/13
4/14
4/15
4/16

Hourly Emissions, NH3, Biogenic Sources, 2014




Hourly Emissions, NH3, Biogenic Sources, 2014